

CREDIT, INDUSTRY, AND THE WAR

EDITED BY

A. W. KIRKALDY, M.A., B.Litt.; M.Com.

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CREDIT, INDUSTRY, AND THE WAR

BEING REPORTS AND OTHER MATTER
PRESENTED TO THE SECTION OF
ECONOMIC SCIENCE AND STATISTICS OF
THE BRITISH ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE. MANCHESTER,
1915

EDITED BY

ADAM W. KIRKALDY, M.A.,

B.LITT., OXFORD, M.COM. BIRMINGHAM,

PROFESSOR OF FINANCE IN THE UNIVERSITY OF BIRMINGHAM,
RECORDER OF THE SECTION

WITH A PREFACE BY

WILLIAM ROBERT SCOTT, M.A.,

D.PHIL., LITT.D., F.B.A.

ADAM SMITH PROFESSOR OF POLITICAL ECONOMY IN THE
UNIVERSITY OF GLASGOW, PRESIDENT OF THE SECTION

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EDITOR'S NOTE

It is hoped that this book may prove to be the foreword to an effort to help in the solution of some of the economic problems which either are, or soon will be, pressing upon the attention of this country.

The discussions arranged by the Economics Section of the British Association at Manchester aroused considerable interest, and there was a widespread demand that they should be available to a more extensive public than could attend the meetings. Under the circumstances immediate publication was deemed to be essential. Thus, although the Reports were interim, and the discussion on Industrial Harmony, not only as incomplete as such discussions must necessarily be, but also somewhat inconclusive, being preliminary, and the views expressed being by no means identical, it was decided to publish with as little delay as possible.

My work as Editor has been considerably lessened owing to the invariable helpfulness and promptitude of the several contributors. Especially am I indebted to Professor Scott and Mr. Egbert Jackson for assistance in preparing the matter for press. I would take this opportunity to thank very sincerely the permanent officials of the Association for their exceeding kindness in assisting, not only in the publication of this book, but on many occasions in my work as Recorder during the present year.

Each contributor is solely responsible for his own facts.

A. W. KIRKALDY.

THE UNIVERSITY,
BIRMINGHAM.

November, 1915.

PREFACE

BY PROFESSOR W. R. SCOTT, M.A., D.Phil., Litt.D., F.B.A.

*Adam Smith Professor of Political Economy in the University of Glasgow ;
President of the Section of Economic Science and Statistics,
British Association for the Advancement of Science.*

ECONOMIC questions have assumed increasing importance during the course of the present struggle, and in all probability their importance will continue to increase for some years after it is ended. The meeting of the Economics and Statistics section of the British Association afforded an opportunity of collecting and discussing the opinions of a large number of persons whose views were of interest or carried weight. Accordingly, the Organising Committee decided to concentrate discussion upon those problems which were of immediate and pressing importance. It appeared that there were three groups of these, namely the prevalence of industrial unrest, the manner in which the labour absorbed by the war was replaced, and the state of credit, currency and finance as affected by the war. The Committee recognised that these problems could not be dealt with adequately by the method usually adopted by the section by means of separate papers. After a considerable amount of discussion it was decided that the best way of treating the problem of the minimising of industrial friction was, in the first instance by assigning one day for a full discussion of this subject. A report of the speeches will be found in the following pages. As a result of that discussion a research committee has been formed which will report to the next meeting.

The remaining subjects presented considerable difficulties. It soon appeared that the problem of outlets for labour after the war was vast and that it introduced many elements which were at present hypothetical. Therefore, for the present, attention was concentrated on one aspect of this problem, namely the extent to which there had been a replacement of the labour of men by that of women since the war. The position during the summer was one of change ; and in order to present some definite picture of the situation to the meeting, it was necessary to organise a very extended investigation—no less

than eighteen investigators having contributed to the inquiry. The Conference which initiated and directed the research consisted partly of members of the Organising Committee, partly of experts who had special knowledge regarding some branch of the inquiry. Prof. Kirkaldy, the Recorder of the Section, acted as Secretary of the Conference. The inquiry was prosecuted actively in the London, Birmingham, Leeds, and Manchester districts. In London, a sub-committee was formed with Professor L. T. Hobhouse as Chairman, Mr. J. St. G. Heath as Hon. Secretary, and Mr. E. F. Hitchcock as Secretary. Professor Kirkaldy organised the investigation in the Birmingham district with the co-operation of Miss Anne Ashley. The interim report which will be found in this volume is necessarily tentative in character, and is limited to the places in which investigations could be made. The phenomena investigated are in a state of transition, and it is hoped that at the next meeting of the Association a further report will be presented.

A second Conference, also composed of members of the Organising Committee, together with experts, was constituted, with Mr. J. E. Allen as Secretary, to report on the effects of the war upon credit, currency and finance. The inquiries involved were long and detailed, and information of great value was placed at the disposal of the Conference by its members and by others who were consulted upon a number of special points. In this case, also, the Report contained in the present volume is an interim one. It was presented to the section over a fortnight before the introduction of the recent Budget, in view of which its discussion of taxation will be found of considerable interest. It is expected that at next year's meeting further information upon several subjects discussed in it will be available.

If the address for which I am responsible be added it will be seen that, as far as the time at our disposal allowed, a serious attempt has been made by co-operative effort to focus and direct economic opinion upon the outstanding economic problems of this stage of the war. It is the earnest hope of those who took part in the work that their efforts may be of some service to the nation at this juncture. It is the practical needs of the situation that have made it seem desirable to issue these results in a form which is necessarily incomplete. Those concerned in the preparation of them would have preferred to have waited for more complete details and for a more

matured judgment upon the facts already collected. By sharing the observations which have been made so far, it is to be hoped that these will be amplified or corrected by others and thus progress may be made as rapidly as possible.

It is my privilege, as President of the Economic Section and as Chairman of the two Conferences, to thank most warmly those who have contributed to the production of this volume. The Council of the British Association was good enough to make a special grant to us under the exceptional circumstances. Without it the Conference on Outlets for Labour could not have proceeded. Professor Kirkaldy, as Recorder of the Section and as Secretary of the Conference already mentioned, has been invaluable. Mr. Allen, the Secretary of the other Conference, was most thorough in his work upon the various stages between the inception and the completion of the Report. To Miss Anne Ashley, Mr. St. G. Heath, Mr. Hitchcock, and Prof. Hobhouse we are very greatly indebted, as well as to the investigators who worked with them. It is most remarkable how men engaged in great affairs responded to the invitation of the Credit Conference. We owe more than I can express to the alacrity with which they placed the stores of their experience at the disposal of this body.

W. R. S.

UNIVERSITY, GLASGOW.

September, 1915.

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CREDIT, INDUSTRY, AND THE WAR

CHAPTER I

ECONOMICS OF PEACE IN TIME OF WAR,
being the Opening Address to the Section of Economic
Science and Statistics of the British Association

BY PROFESSOR W. R. SCOTT, M.A., D.PHIL., LITT.D., F.B.A.,
President of the Section.

THE economists of great distinction who have presided over this Section of the Association in past years have usually addressed themselves to the discussion of the progress of Economic Science in relation to some problem which had become striking or significant at the time when each meeting was held. It has fallen to my lot to prepare an address at a period when the Empire is involved in a war of tremendous moment both to our country and to the world. Not the least dominant phase of this epoch-making struggle is the economic one ; and it is inevitable that, on this occasion, consideration should be given to some of the reactions of this great war upon industry, credit, and finance.

It is both remarkable and significant how silent British economic theory has been upon what may be described as " the economics of war." No doubt there are volumes, treatises, and isolated passages which record the effect of some specific war upon prices, or upon credit, or upon the national finances. Or, again, other works may deal with some practical inconvenience which the writer experienced ; but, when the total result is estimated, it will be found that by far the larger part of the scanty discussions of this subject is either purely historical or else purely practical. In the vast majority of cases our writers have confined themselves to an analysis of the effects of some specific war on finance and commerce with a view to suggesting measures towards counteracting the inevitable

losses, instead of studying the principles of war in general with a view to strengthening the national resources in preparation for future hostilities. Thus, while British economists have said something about former wars, they are almost wholly silent concerning wars to come. This is a fact of immense significance. It demonstrates beyond the possibility of doubt or cavil that in this country there has been no such thing as a mobilisation of economic opinion. On the contrary, our economists can claim with justice that they have been ever on the side of the world's peacemakers, not with false lip-service but through serious and sustained reasoning.

Once Mercantilism began to decline, it is astonishing how little one finds in British economic literature relating to causal relations between war and industry. What there is usually appears as a side issue in some other investigation. For instance, at the end of the seventeenth century, during the eighteenth century, and in the early years of the nineteenth, there was a long controversy over the nature of credit, with frequent digressions upon the character of public debts, which was in effect the consideration of the financing of past wars. In its extremest form one theory represented public borrowings as "a mine of gold"—a statement which influenced both theory and practice during the eighteenth century. The exaggeration of "the fund of credit" no doubt seems strange and almost laughable to us now, but it does not differ greatly in principle from the vague popular opinion that a nation can become richer by increasing its taxes. A public debt as the Midas of the eighteenth century is as much a fairy tale as the modern conception of taxation as a species of "manna falling on the country in a fertilising shower." Naturally there was a reaction from the magic claimed for a state-debt, and the opposed type of thought urged that supplies, even for war, should be raised during the period in which the expense was incurred. The citation by John Stuart Mill of a passage from Chalmers, in which the latter view is expressed, is almost the only echo of this controversy in more recent times. During the last fifty years, if a few occasional writings, such as those of the late Sir R. Giffen "On Consols in a Great War,"¹ be excepted, our standard economic works have scarcely anything to say on war,

¹ *Works*, II, pp. 189-203. The calculation was that Consols would fall 15 per cent. at the opening of hostilities. The fixing of a minimum price during the first months of the war has made it impossible to confirm or refuse Giffen's forecast.

and there is nothing which can be construed into a preparation for hostilities.

But the cultivation of peace by British economists in avoiding the study of the mobilisation of national resources for war has not merely been negative ; it was also positive in proving the advantages of peace and the tendency of enlightened economic views to promote it. More than two hundred years ago Sir Dudley North wrote that " the whole world as to trade is but as one nation or people, and therein nations are as persons. The loss of trade with one nation is not that only, separately considered, but so much of the trade of the world rescinded and lost, for all is combined together."¹ In the same spirit David Hume urged that " our domestic industry cannot be hurt by the greatest prosperity of our neighbours."² Before the end of the eighteenth century men of open mind not only recognised that war was a great evil, but also that there was nothing in international commercial relations to cause it or justify it. And so Burke spoke of the condemnation of war as a commonplace and " the easiest of all topics." Even victory accompanied by substantial material gains is described by Hamilton as but " a temporary and illusive benefit." In one passage he writes : " The emphatic epithet of ' The Scourge of God ' has been aptly bestowed upon the extensive warrior. . . . Riches, thus collected, no more resemble riches acquired by industry in advancing the happiness of the nation than the mirth of intoxication is worthy of being compared to the permanent flow of spirits which health and activity confer."³ The undercurrent of the work of all the great British economists has been ever on the side of peace. Adam Smith suggested measures to prevent wars being undertaken wantonly.⁴ Ricardo shows how free commerce " diffuses general benefit and binds together by one common tie of interest and intercourse the universal society of nations throughout the civilised world."⁵ It would be wearisome to multiply quotations from the long line of great writers, for already enough has been said to prove that the encouragement of the best possible relations with other countries has always been a prominent feature of their teaching.

¹ *Discourses upon Trade* (1691), p. viii.

² *Essays*, I, p. 347.

³ *Progress of Society* (1830), p. 411.

⁴ *Wealth of Nations* (ed. Cannan), II, p. 411.
Works, pp. 76, 160.

This conclusion leads on to the discussion of a new problem. May it not be urged that British economists have been either too selfish or too idealistic—too selfish in inculcating material welfare as an end, to the neglect of those national interests which are now seen to be vital, or too idealistic in seeking a cosmopolitan golden age which has proved to be but a dream? That is in fact, have not our economists in their devotion to peace neglected the economic preparation for war? While it is true that the essential teaching of the master minds has been thoroughly pacific, at the same time they recognised that, while war was an evil, both to the world and to us, it was one that might be forced upon the nation. But it would be a dangerous error to conclude from the rare mention of warfare in our economic literature, that economists had no ideas upon the subject. Adam Smith has shown with considerable detail that the sinews of war consist of consumable goods.¹ Therefore, since his time it was recognised that, if war should come, the strength of the nation on the economic side was to be found in the efficiency of its productive system, in the soundness of its credit and finance, and in the success of its schemes of social betterment which provided a vigorous and patriotic population. To have contributed something towards the making of free men in a free land is an achievement of which the economists of this country have no reason to be ashamed. Moreover, with freedom there is the power of initiative and organising ability. And if more than twelve months of war have taught us anything, it is how much modern warfare involves just those qualities of initiative and organising ability which are required for the successful prosecution of industry and commerce. To the economist it must be a matter of profound regret that circumstances have made it necessary to divert these powers from the arts which sustain and brighten life towards causing the evils of death and destruction. Still it is the hard and grievous fact with which we have to reckon; and, to make the reckoning complete, account has to be taken of the genius of our people in which the work of British economists may claim to have some share. We should not be misled by that curious national trait which no foreigner ever completely understands—namely, our inveterate habit of praising the methods of our rivals as if they were unapproachable in their excellence. In the seventeenth century it was the Dutch

¹ *Wealth of Nations*, I, p. 407.

who were said to be our commercial masters, and very similar things were written later about the French. Therefore, to everyone who is patient enough to look beneath the surface, there is no reason to be perturbed by the commonplaces that are to be found in every newspaper concerning "the triumphs of German organisation." No doubt there is very much we can learn from them in systematic arrangement, but what is of first-rate importance is the different spirit that informs the two methods. German organisation involves a mechanical rigidity, and its initiative is severely limited. Ours, on the other hand, is spontaneous and free. No doubt it is slower in starting—often it may seem to us to be painfully slow—but what it can achieve in the end is something greater, for it is the expression of the free soul of a free people. Therefore, for this reason alone, there can be no doubt as to the successful result, for, whether the time required be long or short, the goal of victory must be reached by that nation which can bring initiative to bear upon the economic side of war. And, however much we in our part of the contest may have suffered at the beginning from the peaceful habit of mind that limited our preparations to a bare minimum, we have in our industrial organisation, however much at times we may depreciate it ourselves, a wonderfully developed instrument, which only needs to be made available for supplying the almost innumerable needs of modern armies. That there has been delay in making some parts of it available as quickly as was desirable and seemed possible, arose in part from the conditions under which our system has grown up and under which it works. Freedom of enterprise depends to a very large extent on the circulation of rapid and reliable information. British initiative has been accustomed to base its judgments upon data collected from various sources. Modern warfare has introduced secrecy and the suppression of news. This, it appears to me, has been one cause, and perhaps the main one, for the slowness of the adjustment of our organisation to war conditions. Initiative has been deprived of one of the important aids upon which it was accustomed to rely. Therefore the problem, which it is to be hoped is at present in process of solution, is how to avoid the disclosure of information which might be of value to an enemy and at the same time to supply our productive workers with sufficient data to enable them to form accurate opinions as to how their efforts can best help the national cause.

In a country in which the ideal of peace has flourished there must always be a considerable dislocation of industry when it diverts its peace-organisation to the purposes of war. As regards Great Britain that dislocation has exerted its force in two distinct waves. First there was the mobilisation and then the recruiting for the new army, concurrently with which there was the diversion of demand caused by the provision of the manifold needs of the forces. At the beginning of the present year this first change might be described as having approached completion, though necessarily the maintenance of reinforcements involved a steady drain on the number of workers. But in the early summer the campaign for increase of munitions brought about a further dislocation. This was a minor one in point of numbers involved, but it has to be noted that it was likely to produce a disproportionate effect upon industry owing to the normal floating supply of labour having already been used up. When the latter change is completed it is to be hoped that, apart from minor adjustments, the transition will be accomplished and the national industry will be established on a war-basis. The two most critical periods occasioned by war are, first, the change from peace organisation to war organisation, and secondly, the converse change after the conclusion of hostilities on a large scale. Ricardo pointed out long ago that the outbreak of war after a long peace was likely to cause distress and a commercial crisis. The great expansion of credit since the last great war introduced an added difficulty. The improvement of transport and communication has linked the whole world together by tenuous filaments of credit. These had proved sufficient to bear a normal strain, but one must experience a certain amount of apprehension when these delicate threads were rudely hacked and hewn by the sword. The financial interests of the country, like the class of *entrepreneurs*, were confronted suddenly with totally new conditions. The old landmarks were gone, and at first a certain amount of blind groping was inevitable. The leaders in finance and industry were suddenly involved in the fog of war, and the compass by which they were wont to steer proved unreliable. Moreover, the situation was such that quick decisions were called for, just when rapidity of correct judgment was peculiarly difficult. The most urgent problem was the maintaining of the credit of the banks amongst their depositors. Here the essential soundness of the credit-system in July of last

year was of paramount importance. Credit resembles a highly elastic body: if it is greatly expanded a comparatively slight pressure may cause a rupture; if, on the other hand, it is not unduly distended, it will bear a shock, though with some quaking, which would shatter a more solid substance into fragments. The comparative equanimity of depositors, added to the inherent soundness of the banking system, was a feature of great strength in times which were in the highest degree anxious. The closing of the Stock Exchange and the temporary breakdown of the foreign exchanges made some measure of external assistance from the State essential, though in the future there will no doubt be considerable discussion amongst economists as to the precise form which it should have assumed.

An unexpected outbreak of hostilities disorganises first the domain of credit, but the disorganisation soon manifests itself throughout the whole range of productive processes. In the general upheaval the normal course of demand is shifted to an unusual extent. That for all kinds of supplies for the forces at once increases, while the consumption of other kinds of goods is subject to considerable fluctuations. Some raw materials are no longer obtainable, having been wholly produced in countries with which communication has ceased, others are procurable only in reduced quantities, while the supply of others is at first uncertain. Again, the state of credit reacts on foreign trade, rendering exporting difficult and in some cases impossible for a time. All this meant that a large diversion of labour and capital became necessary in the first months of the war; and again in the spring of this year the insistent demand for more and more munitions added to the dislocation. With the progress of specialisation in industry there was the apparent risk that such diversion of productive power could only be accomplished at great sacrifice. It would seem that the greater and greater use of specialised machinery with the corresponding specialisation of skill would make the change very difficult, and one which would involve great loss of capital and unemployment. After a year of war we see that the latter problem has dropped below the horizon, though it is likely to emerge again on the return of peace when the converse change from war conditions to peace conditions takes place. As regards capital, manufacturers have developed the adaptation of men and machines to certain special purposes.

In many cases the demand for the products of these industries has diminished very greatly, and it would seem that the fixed capital must remain either partly or wholly unemployed during the war. Recent economic investigation has shown that industry not only proceeds by separating processes of production, but also in surmounting the lines of division formerly regarded as distinct. Thus Dr. Marshall has shown that the operatives in a watch-making factory could work the machines used in gun-making or in sewing-machine-making, or in the making of textile machinery.¹ The experience of the early months of the war has fully confirmed the anticipations of economic theory as to the power of transference of specialised capital and labour from one process (for which the demand has temporarily declined) to another in which it has increased. It is not remarkable that cotton operatives should migrate to woollen mills to make khaki, but it might at first occasion surprise to hear that many makers of brass door-handles were soon at work helping to produce shrapnel-shells—their contribution consisting of the brass driving-rings and copper bands. At the beginning of the winter, machines that formerly made spokes for cycle wheels produced knitting needles. Plant normally used to make gear-cases turned out hollow-ware tins and basins for the troops. Pen-making factories found new employment in manufacturing military buttons. The list of war uses for plant during the first months of hostilities could be very greatly extended, and the establishment of the Ministry of Munitions has added immensely to the employment of plant for war purposes; but enough has been said to show that economic theory has been proved right in anticipating a large measure of recuperative power in productive processes enabling them to re-employ under the new conditions, capital and labour which were temporarily idle. All this is satisfactory for the war period; it must be remembered that on the return of peace the reverse change will have to be made. There may be a short trade boom (arising out of the attempt to restore some of the material ravages of war), but the joint demand from it and from the trades re-opened is likely to be considerably less than the huge present expenditure on manufactures for war. Thus the unemployment occasioned by dislocation of industry through hostilities is likely to be carried forward as a species of suspense account which

¹ *Principles*, p. 339.

must be liquidated not very long after peace. Moreover, international credit is likely to re-act on the situation in a prejudicial manner. Even already the financial system of Germany is more strained than appears on the surface. This fact is advantageous to us as belligerents, but it will probably be prejudicial to us not long after the re-establishment of peace. At present much of the inconvertible paper circulating on the Continent does not affect us here. When the inflation has to be squeezed out after the war, a disturbance of credit is not unlikely.

Important as the flexibility of capital and labour has been, the striking success of maintaining our communications within the Empire and with neutrals has been even more remarkable. Steam and wireless telegraphy have had the effect, when supported by adequate naval strength and preparation, of simplifying the protection of maritime trade routes. The events of the early months of the war afford a brilliant justification of the views of many economists of the advantages of diversified sources of supply of food and raw materials from the colonies and foreign countries. The later operations of German submarines against our commerce and even against passenger ships can bring no real advantage to the enemy, and one cannot find words to describe adequately the infamy of the sinking of the *Lusitania*. The destruction of cargo boats and trawlers is at the worst an inconvenience, but in material loss it is incomparably less than the damage of property which is happening every day on the Western battle front when villages and towns are destroyed by artillery fire.

The inestimable services of the Navy in the general protection of sea-borne commerce may be illustrated to a partial extent by reference to the last occasion on which our maritime trade was subject to serious interruption, namely, during the years of hostilities between 1793 and 1815. At that period Great Britain possessed an overwhelming naval superiority, yet freights and marine insurance were often extraordinarily high. For instance, these charges on hemp and tallow from Petrograd to London were ten times the normal rate. Insurance on hemp was 20 per cent. to 40 per cent. of the value. In some cases the freight and insurance of flax were more than the prime cost. These were moderate rates for that war period. Take the case of silk. It cost £100 to bring a bale of 240 lb. from Italy, instead of the previous rate of £6. These figures seem

almost incredible, but they are vouched for by Tooke.¹ Further, they were only a part of the increased difficulty in transport. The delay was remarkable. It is recorded that on one occasion it took a year—on another, two years—to send a parcel of silk from Italy to England. Interest on capital and disarrangement of manufacture during the extra period of transit might be estimated to add another £30 to the cost of conveying a bale of silk—that is, £130 against £6; so that altogether the cost of transport and allied charges increased by more than twenty times the amount paid in times of peace. Such, in bald numerical terms, is the debt we owe to the silent watch and ward of the Navy, which is of equal benefit to our Allies also.

So far I have discussed questions which relate mainly to organisation and transport; but, in summing up our economic position in the present war, the provision of resources by the various combatants will become increasingly important. When Germany cast the sword of Brennus into the scales of international justice she must surely have forgotten the ultimate influence of the wealth and resources of the British Empire. "To face the world in arms in shining armour" may seem heroic to the Teutonic mind, but it is futile provided that the resources of the world are rightly used against her. This it appears to me is at once our opportunity and our responsibility. War has become so complex that to conduct it upon a great scale demands large capital resources. Our past savings, supplemented by those made during the war, constitute the reserve of the credit of the Allies. No doubt, as in the case of organisation, time will be required to make the full extent of the pressure felt, but it is pressing slowly but inexorably upon the enemy, and as the struggle develops it will press with increasing power. Given the necessary fighting strength of good quality, its efficiency depends upon the extent and adequacy of its supplies. If the struggle be protracted, then victory will rest with the side which can best maintain its supplies, and it is here that our wealth is likely to be a decisive factor. But it must be brought to bear in the right way, and in this respect important functions devolve upon the non-combatant. For many years public and private economy have been forgotten virtues—too often they came near to being regarded as akin to a vice. Now our leaders of public opinion are

¹ *History of Prices*, I, p. 309; *Thoughts and Details of High and Low Prices*, pp. 129, 211.

preaching economy almost as if they had discovered a new religion. Such missionary zeal, even though belated, is advantageous. War makes great changes in Distribution ; and changes in Distribution, when the general standard of living has been rising rapidly, are likely to lead to extravagance, more especially in war-time when all conditions favour waste. But economy, necessary as it is, can be no more than a step. What is required is the maximum supply of goods, in excess of the needs of the civilian population, which will maintain and even increase the efficiency of the fighting forces. In the summer attention was concentrated on munitions, and this is an instance of our national habit of concentrating on the more pressing aspect of some highly complex problem. The effectiveness of the gunner on a war-ship or of the soldier in the firing line requires the product of the labours of many workers : without the full supply his value as a fighting unit deteriorates. Therefore it devolves upon us to supply such goods both for our own forces, and to a certain extent, for some of our Allies also. The effect of public and private economy is to leave more wealth in the hands of the taxpayers, but much of that wealth does not consist of commodities which avail for augmenting the power of the forces. To effect the necessary transformation, such wealth must be transferred from the owner of it, either in the form of taxation to the State or in a subscription to a public loan. The Government then arranges for the acquisition of the commodities it requires by either making them itself here or purchasing them, whether in this country or abroad. In some cases it may be more advantageous to acquire the goods we need from foreign countries by exchanging our own products for them. Now, we already import considerable quantities of food and other necessities, and therefore our purchases outside this country for war purposes constitute an addition to these imports. Against this we have the profits of our shipping and the income on capital invested abroad and in the colonies. The aggregate of the former is likely to be reduced through the war, and there may be a temporary reduction in the latter through the same cause. Also there are, of course, our visible exports and some minor items. Thus it follows that the situation demands as large as possible a production of goods consisting first of supplies for the forces, produced at home, secondly, the home supply of the necessities and simpler comforts of life, and thirdly, goods to export to pay for our imports of military

supplies and of food from the colonies and abroad. And this leads to an important conclusion—namely, that, after the maximum demands for men for both the naval and the military forces have been met, there is a plain duty before those who are left. The exigencies of the times demand that there should be no idle class, whether of rich or poor. We have called out some of our reserves of fighting men, and we must draw also upon our reserves of workers. In the expressive language of our brothers from the Dominions overseas, "it is up to the non-combatant at home not to let the fighting forces down," but by his or her steady and sustained industry to help in providing, directly or indirectly, all the supplies which are required, either in helping to produce these or in making those goods which are exchanged for them. Thus there is a definite duty for every one of us, according to our varied capacities, to take part in a great national endeavour. This is plain common sense. From the specially economic point of view, war is waste and loss. Therefore it is obvious that we cannot work too earnestly or too unsparingly to bring about as soon as possible the cessation of that loss and a return to normal conditions. No doubt, here again organisation is required. The people are not in a position to judge as to the balancing of the needs for reinforcement, for labour for military supplies produced in this country and for labour to produce goods to be exchanged for supplies or food imported. All the more it becomes necessary for the authorities to strike a balance and to issue clear and unmistakable directions.

All this must seem far removed from the principle of *laissez-faire*, the operation of which has become more and more restricted by the mass of governmental regulations and emergency measures. But the people assent to the restriction of their liberty of action under an imperious necessity. Because sacrifices are made in a national emergency, without complaint or murmuring, it by no means follows that the public is learning to love its chains. Unless the war makes a radical change in the national temperament, it would be a political mistake of the greatest magnitude to retain restrictions upon commerce even a week longer than these are unavoidable. In the confused issues of warfare we have the unshakable conviction that we are staking the lives of our soldiers and the whole resources of the British Empire in defence of liberty. It would be a tragedy if, in the defence of liberty, freedom of enterprise

and labour were sacrificed, for in that case victory in war would be tantamount to the defeat of our national ideals.

In all the long history of this Association, it has never before fallen to the one who presided in this Section to survey such a scene of ruin and devastation. To the economist war must ever be the pre-eminent instance of wicked waste. One is almost tempted to discuss again that old problem, debated by Bishop Butler—namely, whether whole nations may become temporarily mad. Yet out of all the suffering and all the loss, something that is necessary to the progress of the world must emerge—something that, as things are, can only be won by sacrifice and sorrow. It has happened before in the history of civilisation, and it has now unfortunately occurred again, that it is needful to defend existing institutions from attacks which menace not only these but the possibility of future development. The sanctity of a nation's plighted word must be maintained as a basis for the stability of international relations. One issue which is involved in the present war is the whole basis of international contract. Without being unduly optimistic one may hope that some compensation for the vast destruction it has caused may be found first in the establishing of treaty rights on a secure foundation, and then that a way will be opened for international agreements which will lessen the risk of future wars. Moreover, the inviolability of public faith is not only of supreme importance in the political sphere; it lies at the root of the whole mechanism of foreign trade and the international money-market. The new "scrap of paper" theory constitutes a bankruptcy of external credit. It recoils with crushing force on the nation whose good faith has become suspect, and it produces a feeling of doubt and insecurity throughout the money-markets of the world. When one remembers Belgium, it is not a little remarkable that one of the best analyses of the causes which determine foreign estimation of a nation's credit has been written by a German. I quote the concluding summary: "These causes are to be found in the opinion which the world holds of a nation's political standards, of the soundness of her institutions, the inviolability of her pledged word, in the last resort of the moral principles which inspire and the intellectual faculties which direct her people's activities." ¹

¹ *On Some Unsettled Questions of Public Credit*, by Prof. G. Cohn, in *Econ. Journal*, xxi, p. 217.

Further, from the economic standpoint this war is one which, provided it ends decisively in favour of ourselves and our Allies, should free us from a menace which has faced this country for a generation. At each great epoch in our history, it has been our duty to prevent the wreck of civilisation through the appearance of a new Iron Age with its doctrine that wealth is the prey of the stronger. And so England resisted Spain, Great Britain Napoleon, and now the British Empire confronts Germany in defence of the principle that force must not triumph over law. Indeed, the present strife is perhaps the only issue from a situation in Europe that was becoming intolerable. Year after year the nations on the Continent were proving their devotion to peace by arming to excess, as they said, to defend peace. The burden grew heavier and heavier, diverting national resources from the improvement of the condition of the people and the growth of commerce. Before the war the annual expenditure of the Powers of Europe on their armies alone had increased to about £290,000,000. There can be little doubt that much of this outlay, as well as that on navies, could be saved. It is to be hoped that, when a durable peace has been signed, a very large saving in this type of expenditure will be effected. Moreover, an abatement of military preparations should have another effect in diminishing the drain on productive processes through compulsory military service. Thus, on the whole, while the losses of the war will be enormous, there are some gains, largely of an immaterial kind, to be placed on the other side of the account—namely, security and the re-establishing of international contract, and, of a material kind, in a possible diminution of the burden of armaments both direct and indirect.

A special aspect of the problems under discussion is the provision of capital for the re-starting of trades contracted by the war and for the restoration of Belgium and other regions desolated during the progress of hostilities. Chalmers, writing a hundred years ago, supposed that in cases of this kind "in a very few years the recovery both of population and labour would be completed."¹ The explanation he gave was far from satisfactory even for the time at which it was written, and it is still more deficient as applied to the present circumstances, when in industrial countries fixed capital is much more important than in Chalmers's day. In the last quarter

¹ *Works*, xix, p. 141.

of a century any great catastrophe, such for instance as the partial destruction of San Francisco by earthquake and fire, has been repaired with comparative ease by bringing capital from outside. But the waste of war renders capital exceedingly scarce ; in fact, a famine of capital after the war has been predicted. Such an anticipation is over-pessimistic, but capital is likely to be obtainable for a time only with some difficulty. It is to be feared that after the war Europe will experience very considerable straits for several years to come. Not only must the waste of war be made good, but its evil legacy in inflated funded and floating debts must be gradually dealt with, lessening by reason of increased taxation the normal margin for new savings. Increased work and greater economy are the only remedies, aided by improved methods of production.

It is to be hoped that some of the inevitable loss will be repaired in time by better methods of organisation and by an accelerated rate of invention. The waging of a just war results in a quickening of the national spirit. It forces a nation out of the easy and well-worn paths of custom and convention. Thus, out of all the suffering and all the loss, some good will come. The large proportion of our young manhood which has gone to serve the country on the seas or in the field, and which returns having looked death in the face without being afraid, will not take up life where it was left. The noble qualities that have been evoked by the stress of battle will remain and will influence civil life during the next generation. The outlook will be both broader and also more simple. Methods of social legislation and administration will become more direct and less timorous. The men who have dared greatly and who have endured will chafe against the rules that have been formed during easier times. Great wars tear away the veils which hide the essential needs of living, and reveal what is fundamental. The directness of vision that has faced danger is not likely to be alarmed in facing the difficulties of our social and industrial problems. And so we may expect with confidence that our legislation will be bolder and also more sane than it has been in the past. The sacrifices of so many cannot pass, when the war is over, and leave no trace. The nation has been re-vitalised in the course of the struggle and the influence of this movement will persist.

In many respects the economic problems that will confront us

after the war will be even more serious, and certainly not less difficult, than those of the present time. Still there can be no doubt that these will be faced with courage and patience. The period of stress through which we are passing has shown the unity of thought and purpose throughout the whole Empire. And this, in spite of many appearances to the contrary, will be a great asset in the future. The great national emergency has caused a closing of the nation's ranks, and it rests with us to keep them firm and steadfast when peace returns. There are plain signs that it may not always be easy, since so many industrial and other difficulties have been carried forward as a suspense account which is to be dealt with when the war is over. National unity is enabling us to progress towards victory, and the same unity will be required to enable us to reap the full fruits of that victory at home. It would be a mad waste not to employ the qualities of heart and mind which have been aroused in this great struggle in the service of peace and social progress. The future may be difficult for some years to come, but difficulties are the opportunities of the strong and courageous. It has fallen to us to live in an heroic age ; and, if we remain true to ourselves and to our high destiny, we shall have the strength and the fixity of purpose to achieve greatly in peace as well as in war.

CHAPTER II

THE PROMOTION OF INDUSTRIAL HARMONY

THIS chapter summarises a discussion on the means for promoting industrial harmony. It was opened by Professor A. W. Kirkaldy and continued by the gentlemen whose names appear at the commencement of the various sections of the chapter.

PROFESSOR A. W. KIRKALDY

We have here to-day a representative gathering of many sections of the business and industrial world, together with some professional economists. We are away from the heated atmosphere of party controversy. We are, as it were, basking in the cool pleasaunce of the British Association. We want to get at facts, lay bare the truth, and find out how trouble arises. Possibly as a result of what is said here to-day, we may be able to bring into existence a small but competent representative committee, whose object it will be to study calmly and dispassionately the whole industrial situation and endeavour to agree the broad lines of a policy which may secure the harmonious co-operation of all sections of the industrial army. Surely the last twelve months have cast a lurid light over what friction-gone-mad can accomplish, and we need to realise very clearly that friction-gone-mad in the industrial world may well produce greater calamities and sufferings than have resulted in the international sphere, from the tearing up of a "scrap of paper." I am convinced, from what I have seen during many years spent in close touch with industrial England, that this country is threatened by a danger far greater than can come from the German or any other external enemy. Friction has existed in many different spheres, but in its most acute and dangerous form it has manifested itself in the industrial sphere.

The war broke out, and in a marvellous way brought about a national harmony for which few had dared hope. After a year of war, while the great mass of the nation is sound, while the Empire as a whole presents an unbroken front to the enemy, in a way which wins

the admiration of the world, and is the despair of the Germano-Austro-Turkish Alliance, there are signs that when once the compelling hand of war is relaxed—and this may come sooner than some think—friction in an intensified form may break out in the industrial sphere.

It is this possibility of friction and its causes that are our concern here to-day. Can we lay aside prejudices, and dispassionately and calmly estimate the evil, and help to realise its causes? If we can see our way to this, we may be able to suggest measures that may minimise resulting harm, and even point the way to harmony instead of friction. This would enable this country to take full advantage of what promises to be a most remarkable economic situation, and thus repair in a comparatively short time the loss and ravages incidental to this war. In the short time at my disposal I shall only attempt to draw attention to two points which I believe to be of considerable importance.

1. Is class war a necessity?

2. What is the truth about wages, profits and dividends?

At the Trade Union Congress held in this city two years ago (1913) two foreign delegates were present. The French delegate in the course of his address¹ said: "Between the employers' class and the State, on the one hand, and the wage-earners on the other, there is a state of war—of perpetual skirmishes and guerilla engagements, and on every occasion of conflict the stronger for the time being is the victor, while the weaker is overborne in the struggle."

He spoke as though such a state of affairs is necessary and can only end when labour becomes so strong that neither the State nor the employer, nor both together can hope to impose their will upon the proletariat. To me this teaching appears to be fundamentally wrong. Unfortunately class warfare has now been taught for so many years, that it is in danger of being accepted as an eternal and immutable truth. If this be so, we are faced with a very serious situation. But is it true—is it necessary? These are questions we must not answer without pausing to consider the issues entailed. Is it not that the strife is really due to ignorance—an ignorance as profound amongst some employers as amongst some labour men? We have given ourselves up as a nation too much to

¹ This address is printed in full in *Economics and Syndicalism*, by A. W. Kirkaldy, pp. 115–125.

the worship of what Aristotle called Chrematistics—*i.e.*, the love of gain and accumulation—rather than to the study and practice of economics, which means the using of the material world in such wise that every member of the community shall be able to develop his or her capacities naturally and healthily. The rush to be rich—a mistaken synonym for happiness and well-being—is a will-o'-the-wisp, which has been luring us on to national decadence. The word *Economics* does not command the attention and respect of some people because it has come to connote to them things that are repugnant to common sense and to our highest interests. But please note carefully that this is not the fault of Economics. It is due to the fact that ignorance exists as to Economics and what it teaches. I know only too well with what contempt some employers and workers are wont to view the teachings and theories of the Economist. Consider some elementary points: surely what is taught on the subject of *Production* should commend itself to the common sense of every thinking man. In order that the producer of wealth may obtain the best results, one of the first requisites is the harmonious co-operation of the factors of production. Friction or suspicion amongst these inevitably lessens the amount produced, for as we shall see, when we consider salaries and wages, whatever tends to decrease production must decrease the real amounts received as salary or wages. Now it is true that the earlier Economists concentrated their attention to too great an extent upon *Production*—the amount produced being their main consideration. Unfortunately, with the swing of the pendulum, men in touch with practical life have erred almost equally in concentrating their attention on what the Economist calls *Distribution*. Demands are made for a higher standard of living, for an increased share to each claimant of what is produced; and the older teachings on *Production* are in danger of being left severely alone.

What seems to me to be required at the present moment, is a sane outlook over the industrial sphere as a whole; for what concerns the well-being of the nation is not only that production shall be carried on on right lines and to the fullest extent, but that what is produced shall be equitably distributed amongst those responsible for its production. Nor do these two cover the ground adequately; for not only must commodities or wealth be rightly produced and equitably distributed, but they must be wisely

consumed. Thus every section of our industrial army should have correct knowledge on the production, the distribution, and consumption of the results of its labour. If you concentrate your attention on either one or two of these, the greatest satisfaction cannot be obtained by the community, because our economic position can only approach perfection when our wealth is *rightly produced, equitably distributed, and wisely consumed.*

There is, unfortunately, among both employers and employed, a great lack of knowledge on these somewhat elementary subjects. Broadly speaking, among employers there is too great a desire to gain wealth for wealth's sake ; and amongst workers to increase wages, without stopping to consider adequately how the fund is produced from which profits, dividends, and wages are drawn. And when wealth or high wages are obtained there is amongst all ranks of the community too great a tendency towards waste and extravagance, without a thought as to one's responsibility to the nation for a right use of one's resources. In this connection then, there are two thoughts I should like to see this section of the British Association consider carefully :

1. Does class warfare lead to a serious diminution in production ?
2. Do we take a broad enough view of our Economic position ?

It is estimated that during the first decade of this century, trade disputes led to 120,000 years of lost hours ; some or all of this loss may have been justifiable, and this brings me to the second point which I wish to see discussed here. What is the truth about wages and profits ? Both these are difficult problems, and require careful study. Half a century or so ago Economists earned for their subject the name of the Dismal Science, mainly because of their theories on wages. The Iron Law taught that wages are paid out of an existing wages fund. If this were true, one section of labour could obtain higher wages only at the expense of the mass of labour. An American Economist cleared up this mistaken opinion, and pointed out that it is superficially true that wages are paid out of existing wealth, but this is only for convenience sake. Really wages are limited by the amount of wealth produced, *i.e.*, the more that is produced the greater may be the wages fund ; thus with decreased production, in the long run, there must be a decrease in real wages. Nor are profits, whether high or low, necessarily made at the expense of the workman. So far as all the great staple

commodities are concerned, there can be only one price for articles of the same quality in the same market. There will be many manufacturers producing the same goods for the market, and no two of them may produce at the same cost, although where organised labour is employed the rate of wages will be the same. The variations in cost of production are due not to the workmen, but to the varieties of organising skill among the different employers. The employer producing at the greatest cost is indirectly the determiner of price, for he cannot for long sell at a loss. It is, in fact, the demand for the goods made by the least competent employer that enables the more skilful employers to make profits, and the most highly skilled employer, *i.e.*, the best business organiser, makes the greatest profits.

One would like to have the time to go fully into the economics of wages and profits—but the above short sketch may perhaps be sufficient for our immediate purpose. It will serve anyway to draw attention to the necessity for obtaining real knowledge before dogmatising.

If we could research on these lines it might help to suggest a system by means of which the labour force of a country, which in its essence is one and indivisible, and includes all those engaged in the work of production, from the man whose brain organises, to the boy whose hand fetches and carries, might be graded in such wise that the real value of each member of it could be determined and his rate of remuneration fixed. With full knowledge as to the fair share of production that is due to each grade of labour there would be equitable distribution, and when men were convinced that they were obtaining their fair reward, production would be stimulated, for with increased production, each man's share may be greater.

Can a representative committee be appointed to work at this subject until it has suggestions to make that may be offered for the acceptance of the industrial community?

In conclusion, I earnestly beg that in what we say and do here to-day, we shall try to forget old prejudices, cast away all thought of making a personal score over those who think and act differently from ourselves, so that together we may try to find that path which may lead to national harmony. If this be attained there can be no doubt as to the future of our Empire. Can the capitalist, the organiser, and the worker lay aside those feelings of animosity that

have almost become the rule, and in a quiet atmosphere, work together for the common good? I am convinced that by doing so, each one would find greater happiness, and a reward higher than can be obtained from the accumulation of millions on the one hand, or on the other the successful organising of the forces of either capital or labour, with the object of winning what will probably end in an empty victory. You may defeat what you consider to be the enemy in the industrial sphere, but in doing so will you not inevitably bring loss on the whole community? Here and now it seems to me we have a golden opportunity to break away from an evil past, and enter upon a future whose possibilities for the good of mankind are limitless.

ADDENDUM

Mr. Wm. Thorne, M.P., in his interesting speech, gives a short account of the conciliation system employed by the Blast Furnace Workers. Wages are governed by the selling price of pig iron, and an audit is held every quarter by an accountant in whom both masters and men have confidence. This system has resulted in practically eliminating friction. The reason for this is quite clear. The rate of wages for normal times and prices are agreed, any deviations on either side of the normal, automatically affect wages. The men know the facts and are content. Why should not some such arrangement obtain in every industry? It does in some, *e.g.*, in the cotton industry, as is shown by Sir Charles Macara.¹ When bankers conducted their business secretly, there were constantly recurring commercial crises. The panic element has been eliminated from banking and finance because the commercial world has now greater opportunities for gauging the facts about financial conditions. May it not be that the same (*mutatis mutandis*) might be found true of the industrial world? Let both masters and men share their confidences. Perhaps the employers might lead the way in this, and if they did, the men would follow—and when once causes for suspicion were removed a long step would have been taken in the direction of industrial harmony.

SIR CHARLES W. MACARA, BART.

The subject we have to-day met to discuss, viz., the relationship between capital and labour—is one of supreme importance at any

¹ Cf. page 25.

time, but more especially so at a time of national crisis such as that through which we are at present passing.

In the early days of the war, I was one of those approached by representatives of the Government regarding the effect the war would have upon industry, and what could be done to minimise the dislocation that was certain to ensue and to keep the workpeople employed as much as possible.

Recognising the colossal task with which the Government was confronted, and that it was essential that the assistance of the most experienced practical men should be taken advantage of, I strongly advocated that all existing organisations of capital and labour, and indeed of every kind, should be at once brought into requisition in preference to forming new ones to deal with the crisis. There is ample correspondence to prove, and resolutions have been passed and published showing, that this supremely important matter has been urged on the Government without avail. Everyone who has had experience of such work will realise that creating new organisations cannot be efficiently carried out without expenditure of much time and labour, whereas it is comparatively easy to adapt existing organisations to deal with great and sudden emergencies—and time is an all-important factor.

Having visited many of the principal countries of the world, and having studied their methods of working, I am convinced that, upon the whole, this country is as well organised as any, but the Government has not understood how to utilise existing organisations as they should have done, and in this respect we have been placed at a disadvantage with enemy countries whose Governments, on the outbreak of war, at once utilised all their existing organisations, and deputed to their most experienced industrial and commercial organisers, definite and important duties in connection with the carrying on of the war. Had this been done in England, instead of Ministers keeping matters in their own hands, it is my opinion that we could have faced this great upheaval much more effectively than has been the case.

Efficient co-operation of the industrial, commercial, financial, scientific, transport, and labour interests with the Government would have enabled our enormous resources to have been brought into requisition from the very commencement of the war.

As it is, after twelve months of war we are only now realising

what proper co-ordination of all our vast resources might have accomplished—indeed, so far as practical results are concerned, the difference between thorough organisation and the reverse can scarcely be comprehended. It is unfortunate that the services of men who have led the great organisations of capital and labour have not been taken advantage of to anything like the extent they should have been.

Had this co-operation between the various organisations existed, it might have been possible to have dealt more effectively with the problems connected with the supply of the necessities of life, which, I pointed out to the Government, would not only constitute the chief difficulty in carrying on the war, but would be the main factor in terminating the struggle. Certainly, so far as this country is concerned, much might have been done to prevent the undue rise in prices which has inflicted hardships upon all, and especially on the working people, and has been the main cause of the industrial unrest that exists. On the other hand, nothing could have been more splendid than the response of the nation to the call to arms, and the magnificent and unprecedented heroism and self-sacrifice which have been displayed—but, again, the failing has been the want of co-ordination of the resources in men with the resources for the production of the munitions of war, which I believe the National Register will speedily remedy.

It is useless, however, dwelling upon the errors of the past which cannot now be altered, and the only object in referring to them is that in the future full advantage may be taken of the experience gained, so that the vast resources of the nation may be utilised to the fullest extent.

My long connection with the cotton industry, one of the greatest and most complex of our national interests, has compelled my giving a large amount of attention to the relationship between capital and labour, not in this industry alone, but it has brought me into close personal touch with many of the leaders of capital and labour in other staple industries, all of which are interdependent.

It has been my endeavour over a long term of years to impart to those who were selected by the working people to safeguard their interests, as much information as possible regarding what might be considered the employers' view of the carrying on of the industries. By so doing I felt that the realisation of the employers' and

workpeople's interests being identical, would go a long way to smoothing over the differences which from time to time arise, and would help to prevent disputes regarding the division of the profits of industry, and also to promote mutual respect for the rights of both.

I attribute the comparative freedom from general stoppages in the cotton industry during the past twenty years—an immense change from the conditions that obtained in the previous twenty years—to the operation of the famous Charter which terminated the twenty weeks' struggle in 1892-93, and which declares in its preamble that "the representatives of the employers and the representatives of the employed hereby admit that disputes and differences between them are inimical to the interests of both parties, and that it is expedient and desirable that some means should be adopted for the future whereby such disputes and differences may be expeditiously and amicably settled and strikes and lock-outs avoided." Other important factors are the educational work that has been extensively carried on, and the co-operation of the representatives of the operatives with the representatives of the employers in the promotion of public-spirited movements for the maintenance and extension of an industry which plays such a prominent part in our national welfare. I have endeavoured to carry this educational work still further, and, after numerous conferences, a plan was devised and has now been in operation for a number of years, whereby outside experts, who are independent of both workpeople and employers, and each independent of the other, are brought in, and by the aid of a tabulation of thoroughly reliable statistics it is possible to show accurately the profits of the industry at any given time or over a period of years. This scheme provides automatic arbitration without an arbitrator.

Another great factor in preventing wages disputes in the cotton trade during the past twenty years has been the limiting of the percentage of the rise and fall of wages, and also that when any change has taken place a certain time must elapse before any further change can occur. It is much to be desired that this condition shall be agreed upon in all industries. When fully explained, the simplicity of the scheme for ascertaining profits and its fairness are at once apparent, and I believe it is capable of being adapted to almost any industry. Disputes very often arise from an exaggerated view of the return on capital invested in industry generally, and if some

means can be devised by which this can be fairly accurately gauged, it would often prevent unreasonable demands being made by workpeople or the refusals on the part of employers to share their prosperity with the employee.

When industries are well organised on both sides, and vicissitudes arise which may render it necessary temporarily to curtail production, co-operation between the organisations of employers and workpeople might be requisitioned with most beneficial effect.

Feeling strongly that many disputes might be avoided by thorough investigation by practical men when a deadlock arises, I conceived the idea of the Government appointing a body consisting of an equal number of thoroughly experienced representatives of capital and labour connected with the staple industries of the country, which, as I have already said, are interdependent. After securing the approval of many of the most prominent leaders of capital and labour, the Industrial Council was appointed by the Government in October, 1911, and high hopes were entertained as to the services this body would render in the cause of industrial peace. But for some reason which it is difficult to understand, and which has never been explained, this body was utilised only to a very limited extent before the war, and, notwithstanding the very considerable industrial unrest that has occurred since the war, it has not been utilised at all.

Another matter which is equally inexplicable is, that the result of an extensive inquiry into industrial agreements and their observance which was deputed by the Government to the Industrial Council, and which occupied thirty-eight long sittings in 1912-13, has never been utilised.

A perusal of the report that was issued proves conclusively not only the desirability of, but the absolute necessity for, the thorough organisation of both capital and labour, and that where this obtains disputes are usually settled between the parties themselves. The main obstacle to the perfecting of these organisations is the selfishness of a small minority of both employers and workpeople, who remain outside the various organisations, but who do not hesitate to take full advantage of the public-spirited and self-sacrificing work of the majority.

A good deal has been said about Trade Union limitation of output. I venture to express the opinion that this is against the true interests of labour—indeed, it would be on a par with the persecution of the

great inventors who have done more than any other men to improve the position of labour, and to place England in the proud position of being the greatest industrial and commercial nation of the world.

I am personally acquainted with many of the official representatives of labour in the staple industries, and upon the whole I have formed a high opinion of their capacity and fairness, and it is only by the rank and file following their leaders that they can hope to be successful in securing their legitimate rights—an army without leaders can accomplish nothing.

The inquiry by the Industrial Council, already referred to, also demonstrated that compulsory arbitration for large bodies of men by legal enactment is impossible, and therefore it should never have been included in the "Munitions Act."

I hold strongly that the interference of politicians with industrial disputes is calculated to generate bitterness between capital and labour, and often leads to inconclusive settlements which are against the best interests of the industries. It is not to be expected that it is possible for those who devote their whole energies to politics to have the necessary knowledge of the intricacies of the numerous industries or the varying conditions under which they are carried on.

The employers have the idea that this interference places them at a disadvantage, and that such a feeling should exist, although the workpeople may gain an immediate apparent advantage, is ultimately prejudicial to the real interests of industrial peace and the national welfare. In this connection I should like to emphasise that a large proportion of the gross earnings of industry goes in the payment of labour and of the expenses necessary to the running of the industries, and even under normal conditions it is only a small margin that is left to remunerate those who have invested their capital. In a crisis such as the present, this margin may not only vanish but there may be a diminution of capital, and it must be borne in mind that the employers' resources are not unlimited.

The effect of the war on industry has been most varied. Certain industries have been exceptionally profitable; others have suffered severely, notably the cotton industry, which is dependent for over three-quarters of its employment upon export trade in competition with many other countries. To deal with the wages question without taking into consideration the varying conditions is obviously unfair. A late President of the Board of Trade made a statement

a year or two ago that a sum of no less than £2,400,000,000 is invested in joint-stock companies alone in the United Kingdom. This vast capital belongs to millions of people and is the accumulated savings of brain and muscle, many small investors depending upon it for their living. There may be, therefore, quite as much suffering among them from the effects of the war as among the workpeople for whom this capital finds employment. A thorough investigation into all the circumstances is absolutely necessary before giving any award in a wages dispute, instead of, as is too frequently done, ignoring these considerations or splitting the difference. If it is proved that an industry is making exceptional profits it is only fair that the workpeople, who may be involved in extra strain, should share in this prosperity, but in the event of an industry being adversely affected, this policy might, in the long run, result in the workpeople being thrown out of work altogether.

It would be difficult to conceive any better medium for preventing or settling disputes than such a body as the Industrial Council. To this Council the Government should refer all disputes that the parties themselves fail to settle, and the decision should be published.

In any dispute in a staple industry which results in a strike or a lock-out, it is not only the combatants who suffer, but enormous numbers of people who have no direct interest in the dispute are deprived of their means of livelihood; indeed, it must never be overlooked that the whole trade of the country is one vast organism, and it is essential that the national welfare must have the primary consideration in any dispute that may arise.

Any refusal of either of the parties to a dispute to submit their case to a tribunal composed of an equal number of experienced representatives of capital and labour with a non-political chairman appointed by the Government, would be strong presumptive evidence against the fairness of their demands, and the impression made on those whose interests are seriously prejudiced by the dispute, and on the public generally, is the only compulsion possible, and it would usually be effective.

SUMMARY.—In this paper I have endeavoured to show :

1. That harmonious relationship between capital and labour is always of the utmost importance, and that at a time of great national crisis it is supremely so.

2. That in order to cope with such a colossal task as that by

which the Government was confronted, the task would have been lightened and much would have been gained, had they at once enlisted the assistance of experienced industrial organisers, and co-ordinated all existing organisations.

3. That the United Kingdom is as well organised as any other nation, and had there been effective co-operation of the industrial, commercial, financial, scientific, transport, and labour interests with the Government from the commencement of the war, the position in every respect to-day would have been vastly better than it is.

4. That by the co-ordination of these interests, the problems connected with the supply of the necessities of life, and with the undue raising of prices of commodities, might have been coped with much more successfully than they have been.

5. That the rise in the prices of commodities has undoubtedly been the main factor in creating industrial unrest.

6. That the only object in calling attention to the errors of the past is that we might profit by the experience gained, and so utilise to the utmost the vast resources at our disposal.

7. That the interference by politicians in industrial disputes is to be strongly deprecated, on the ground that it often leads to inconclusive settlements, it being impossible for politicians to have the necessary knowledge of the intricacies of the different industries or their varied conditions of working ; that such interference only engenders bitterness and does ultimate harm.

8. That thorough organisation of both capital and labour is essential to the smooth working of the industries, and that where this is the case, disputes are generally settled by negotiations between the parties themselves.

9. That disputes frequently arise from an exaggerated estimate of the return on capital, and that schemes for ascertaining this return should be promoted, as exaggerated views often lead to unreasonable demands.

10. That the Industrial Council, which was appointed by the Government in 1911, and which is composed of an equal representation of capital and labour, with a non-political chairman, has not been utilised since the outbreak of war, that no adequate explanation of this has been offered, and that the valuable report of its inquiry into industrial agreements has not been made use of.

11. That the enforcement of compulsory arbitration where large bodies of men are concerned is an impossibility, and that an inquiry into the merits of a dispute by experienced men representing capital and labour, and the publicity given to its findings, would, together with public opinion generally, supply the only effective compulsion.

12. That Trade Union limitation of output is against the best interests of labour.

13. That official representatives of labour are generally men of capacity and fairness, deserving of the confidence of the rank and file.

14. That the effect of the war upon industries has been varied, and that any war bonus or wages advance should be granted only after full investigation by leaders of capital and labour.

CONCLUSION.—In conclusion, I have endeavoured to deal with a complex problem from the standpoint of one who, during the past twenty years, has been frequently placed in the difficult position of having to preside over conferences of masters and men in connection with disputes, while occupying the position of President of the Masters' Federation during that period. Whatever success may have attended this work is mainly attributable to being able to eliminate personal interests, and to view matters solely from the standpoint of endeavouring to act fairly between man and man. From a wide experience I have come to the conclusion that nothing is gained from strikes and lock-outs; that the leaders of capital and labour have exceptionally heavy responsibilities; and that industrial peace, especially at present, is absolutely essential. Mistakes and the difficulties they cause frequently prove to be blessings in disguise. So far as the British nation—I might say Empire—is concerned the greater the difficulties to be faced, the greater is the energy and determination to overcome them. It is fervently to be hoped that such an arousing is now taking place, and that everyone is being made to feel the seriousness of the situation, and that all classes will be prepared to make any sacrifices that may be necessary to ensure the speedy and victorious termination of the unprecedented struggle in which we and our Allies are engaged in defence of freedom and civilisation.

ADDENDUM

The following statement, dated the 10th of October, 1911, was issued by the Board of Trade :

His Majesty's Government have recently had under consideration the best means of strengthening and improving the existing official machinery for settling and for shortening industrial disputes by which the general public are adversely affected. With this end in view, consultations have recently taken place between the Prime Minister and the President of the Board of Trade, and a number of representative employers and workmen specially conversant with the principal staple industries of the country, and with the various methods adopted in those industries for the preservation of peaceful relations between employers and employed.

Following on these consultations, and after consideration of the whole question, the President of the Board of Trade, on behalf of His Majesty's Government, has established an Industrial Council representative of employers and workmen. The Council has been established for the purpose of considering and of inquiring into matters referred to them affecting trade disputes; and especially of taking suitable action in regard to any dispute referred to them affecting the principal trades of the country, or likely to cause disagreements involving the ancillary trades, or which the parties before or after the breaking out of a dispute are themselves unable to settle.

In taking this course the Government do not desire to interfere with but rather to encourage and to foster such voluntary methods or agreements as are now in force, or are likely to be adopted for the prevention of stoppage of work or for the settlement of disputes. But it is thought desirable that the operations of the Board of Trade in the discharge of their duties under the Conciliation Act, 1896, should be supplemented and strengthened, and that effective means should be available for referring such difficulties as may arise in a trade to investigation, conciliation, or arbitration, as the case may be.

The Council will not have any compulsory powers.

The following gentlemen, in their individual capacity, have accepted Mr. Sydney Buxton's invitation to serve on the Council :

EMPLOYERS' REPRESENTATIVES

MR. GEORGE AINSWORTH, Chairman of the Steel Ingot Makers' Association.

SIR HUGH BELL, Bt., J.P., President of the Iron, Steel, and Allied Trades' Federation and Chairman of the Cleveland Mine Owners' Association.

SIR G. H. CLAUGHTON, Bt., J.P., Chairman of the London and North-Western Railway Company.

MR. W. A. CLOWES, Chairman of the London Master Printers' Association.

MR. J. H. C. CROCKETT, President of the Incorporated Federated Associations of Boot and Shoe Manufacturers of Great Britain and Ireland.

MR. F. L. DAVIS, J.P., Chairman of the South Wales Coal Conciliation Board.

MR. T. L. DEVITT, Chairman of the Shipping Federation, Limited.

SIR THOMAS R. RATCLIFFE ELLIS, Secretary of the Lancashire and Cheshire Coal Owners' Association and Joint Secretary of the Board of Conciliation of the Coal Trade of the Federated Districts, etc.

MR. F. W. GIBBINS, Chairman of the Welsh Plate and Sheet Manufacturers' Association.

SIR CHARLES W. MACARA, Bt., J.P., President of the Federation of Master Cotton Spinners' Associations.

MR. ALEXANDER SIEMENS, Chairman of the Executive Board of the Engineering Employers' Federation.

MR. ROBERT THOMPSON, J.P., M.P., Past President of the Ulster Flax Spinners' Association.

MR. J. W. WHITE, President of the National Building Trades Employers' Federation.

WORKMEN'S REPRESENTATIVES

RIGHT HON. THOMAS BURT, M.P., General Secretary of the Northumberland Miners' Mutual Confident Association.

MR. T. ASHTON, J.P., Secretary of the Miners' Federation of Great Britain and General Secretary of the Lancashire and Cheshire Miners' Federation.

MR. C. W. BOWERMAN, M.P., Secretary of the Parliamentary Committee of the Trades Union Congress and President of the Printing and Kindred Trades Federation of the United Kingdom.

MR. F. CHANDLER, J.P., General Secretary of the Amalgamated Society of Carpenters and Joiners.

MR. J. R. CLYNES, J.P., M.P., Organising Secretary of the National Union of Gasworkers and General Labourers of Great Britain and Ireland.

MR. H. GOSLING, President of the National Transport Workers' Federation and General Secretary of the Amalgamated Society of Watermen, Lightermen, and Watchmen of River Thames.

RIGHT HON. ARTHUR HENDERSON, M.P., Friendly Society of Ironfounders.

MR. JOHN HODGE, M.P., General Secretary of the British Steel Smelters, Mill, Iron, and Tinplate Workers' Amalgamated Association.

MR. W. MOSSES, General Secretary of the Federation of Engineering and Shipbuilding Trades and of the United Patternmakers' Association.

MR. W. MULLIN, J.P., President of the United Textile Factory Workers' Association and General Secretary of the Amalgamated Association of Card and Blowing Room Operatives.

MR. E. L. POULTON, General Secretary of the National Union of Boot and Shoe Operatives.

MR. ALEXANDER WILKIE, J.P., M.P., Secretary of the Shipyard Standing Committee under the National Agreement of 1909 and General Secretary of the Shipconstructive and Shipwrights' Society.

MR. J. E. WILLIAMS, General Secretary of the Amalgamated Society of Railway Servants.

Additions may be made to the above list.

The Members of the Council will, in the first instance, hold office for one year.

SIR GEORGE ASKWITH, K.C.B., K.C., the present Comptroller-General of the Labour Department of the Board of Trade, has been appointed to be Chairman of the Industrial Council, with the title of Chief Industrial Commissioner; and MR. H. J. WILSON, of the Board of Trade, to be Registrar of the Council,

MR. WILL THORNE, M.P.

Mr. Will Thorne, M.P., speaking as a representative of the Trade Union Congress, said he approved of many of the principles involved in Sir Charles Macara's paper. He was in entire agreement with that part which referred to the Industrial Committee appointed by the Government two or three years ago. Upon that Committee there were representatives of organised labour and of employers, and evidence was submitted to the Committee from all quarters. Sir Charles had suggested that in future this Committee should have all industrial disputes relegated to it for consideration and decision, but he took it that Sir Charles did not mean the whole of the Committee, which would be rather unwieldy. He should have no objection to a number of gentlemen being selected from the Committee to consider these questions. The gentlemen who adjudicated at the present time upon questions of work and wages—Sir George Askwith, Sir George Gibb, and Sir Francis Hopwood—had not been selected from the class to which the speaker belonged, and he did not think it was possible for them to give fair and impartial decisions. They were not in a position to have consultations with delegates of organised labour, and in consequence of the tremendous number of questions submitted to them, it was almost impossible for them to deal with them as speedily as the urgency of workmen's claims required.

He thought he was justified in saying that during this war the Trade Unions had behaved with patriotism. In the early stages of the struggle, the larger and more responsible of them decided to stop all strikes. The leaders were severely criticised by the members of the Unions, because it was thought there was a good chance at that time of winning all they were striving for. But the Unions realised that it was essential that the organised workers should close their ranks in order to prosecute the war to a successful issue. Organised labour had always been opposed to compulsory arbitration. To begin with, it must be enforced by penalties. Another reason for opposing it was that if a decision was given in favour of the workmen and against the employer, there was nothing to prevent the employer from closing down his factory and throwing his workpeople on the street. That was a lop-sided bargain. But he had always been in favour of what might paradoxically be called

"compulsory conciliation"—the compelling of workmen and employers to meet together round a common table to discuss pros and cons, with power, if the discussion failed to reach a settlement, of resorting to a strike or a lock-out. Since 1889 there had undoubtedly been a better understanding between employers and workmen. We had had since that time Conciliation Boards established, we had had Co-partnership, what was known as the Premium Bonus System, and what was called Co-operative Production. The Union he represented was connected with several Conciliation Boards, but he wished to refer specially to that for the blast-furnace workers. In that case there was now no need to discuss wages and hours. The wages were governed by the selling price of pig iron, and every quarter an audit was held in which both sides had perfect confidence. If either side was not satisfied with the decision given by the chartered accountant, it had the right to have an inquiry, but during the last ten years it had been necessary to have only one such inquiry. If the Conciliation Boards were more numerous it would be a good thing. Where the Boards had been in operation there had been no strikes, although the workmen had not always been satisfied. Under the Boards a minimum and a maximum wage had been fixed, but the maximum had never yet been reached, though the minimum had! Even if wages were to rise to the maximum of 30 per cent. over the basis rate, that would be inadequate to meet the present situation. The rapid increase in the cost of living was the chief cause of the present troubles. In some cases there had been absolutely no economic necessity for the increase of prices. Take coal as an instance. In the early part of the war, when the miners had not received a single extra farthing of wages, for some reason best known to the colliery owners and merchants, consumers were called upon to pay enormously excessive prices for coal. In London the price was advanced in some cases by as much as £1 a ton, because the shipowners took advantage of the shortage of ships and put up the freights by from 15s. to £1 a ton, though the sailors and firemen never had the slightest advance in wages. During the past twelve months London alone had been exploited on its coal consumption to the extent of £8,000,000. If the coal consumption of London were taken as one-eighth of the consumption of the country as a whole, it was easy to calculate what coal consumers had been called upon to pay since the war began,

The public had to pay in another way, because the municipalities and the private gas companies had been compelled, so they said, to raise the price of gas. If the Government had done with the collieries and the munition and armament factories what they had done with the railways and worked them on the same basis of guaranteed profits, we should have had no trouble at all in the coal-fields.

He was one of those who believed that it would be a long time before we had industrial harmony under our present system of production. He could not see how it was possible to harmonise the opposing forces of the employers on the one side and the employees on the other. Friction might be minimised where employers were reasonable and were anxious to advance wages and reduce hours so far as the profits allowed—he quite recognised that you could get only so much juice out of an orange. It seemed to him that the great fight to come was on the question of the distribution of wealth. That was the cause of the whole question. He was perfectly certain that under our present methods the wage-earners were not getting what they were entitled to. If we referred back fifty years, we should find that out of the total wealth produced in a year, 800 millions, the wage-earners received 400 millions. To-day we were told that the wealth produced in a year was 2,400 millions. If the wage-earners had a half of that to-day, the present labour unrest would be largely diminished because it would mean an increase of 15s. a week in wages all round. Time would not permit him to say how this better distribution of wealth might be brought about, but there were one or two ways by which the workers could get a greater share of it, notably by fairer methods of taxation, namely, an equitably graduated system of income tax and super-tax, and an increase in death duties. Revenue thus obtained would render unnecessary taxes taken from the pockets of the wage-earners, on tea, sugar, and other household necessities.

In conclusion, he desired to return to his remarks on Conciliation Boards, and advocated their formation as a means of minimising disputes between employers and workpeople in all industries where it was possible to arrange for wages to rise and fall according to the selling price of the products, but it was necessary for a minimum wage to be fixed sufficiently high to support an ordinary family household. Although Conciliation Boards would not solve all

labour problems they were, in his opinion, of benefit to both employers and workmen.

SIR HUGH BELL, BART.

The subject we are discussing does not owe its existence to the war—it existed long before. I have come before you to make some suggestions in consequence of the paper by Professor Kirkaldy. I am an ironmaster engaged in the working of minerals required for the production of iron and steel [and I make not an inconsiderable quantity of that commodity, but when I come to compare myself with an American firm I don't begin to exist]. I have this advantage, that I am able to deal with the whole process, for I begin with the raw materials—coal, ironstone, and limestone—which my firm produces from its own mine and quarries, and deal with the finished product ; so that any analysis which I make deals with the whole of the commodity, and not only with some part of it. In some industries like, for example, the textiles, the raw material—cotton or wool or silk—comes from abroad, and thus escapes analysis. Its cost is included in payments to others. I am going to tell you what is the result of making steel under the conditions I have described. The figures are simple, and I must ask you to accept them from me. If you form your committee, I shall be glad to substantiate them. In every ton of steel I make, from 70 to 75 per cent. of the cost is labour. There remains between 25 and 30 per cent. to pay all other outgoings, including that which I regard as a very essential part, namely my profit. If, after I have completed my transaction and paid everything that is due from me, there remains in my possession 10 per cent. I am a very fortunate man. There is 70 per cent. labour and 10 per cent. which I hope to keep for myself. There remains between 15 and 20 per cent. for all other outgoings. No doubt in an ultimate analysis a great deal of that, too, will fall under the head of labour. In 15 to 20 per cent. there is an item to which I must draw attention even in my case, when I do so much with my own workmen and machines. Some part, as for example, all the railway carriage, is done by others. These unreasonable persons will not do services without getting some profit for themselves, and thus out of that 15 to 20 per cent. comes the interest or profit paid to others. Some portion of it

goes in rates and taxes ; and fully one-half of the taxation we pay goes for the remuneration of labour. But I should explain that in my analysis I have endeavoured to separate the portion of rates and taxes which goes in payment of wages. There remains, as I have said, 10 per cent. for me. If any one will take the trouble to get the balance sheet of any industrial enterprise—I do not care what it is, whether cotton, iron, or anything else—he will find that, of the total amount of profit the concern earns, it never dares to distribute more than between one-half and two-thirds. That is to say, supposing out of the gross revenue, after you have paid all your outgoings, there remains something like 10 per cent., if of that you divide among your shareholders more than between 5 per cent. and 7 per cent., you will speedily be in the bankruptcy court. The reason of that is obvious. Apart from all other considerations, the Income Tax Commissioners will not let you put aside anything like the amount for repairs you think justifiable, and accordingly you have to take out of your surplus revenue a certain proportion of your profits in order to maintain your works. No doubt, if you are wise, the money thus taken is expended in a way to increase profits in the future. When I explain all this to my workmen they say to me, “ Yes, but you have got very much richer ”—a fact which I regret to say I cannot deny. (In these times one would be glad to be called poor.) “ It is perfectly true,” I say, “ but whose advantage is that ? If I did not get richer, I should not have money to invest ; if I did not have money to invest, I could not improve my works ; if I did not improve my works, I could not give you employment.” For every thousand men anyone has in his employment there are about ten men every year coming to maturity and wanting a job. They always want a job at the works to which they belong. Unless, therefore, for every thousand men, you have laid aside the capital necessary to employ these ten men, they will have to find employment elsewhere, and if either you or some other persons have not laid aside capital, these young men will not find employment at all.

But to return to the question of my profit. Out of what fund am I going to pay a 10 per cent. increase in wages ? If I pay 10 per cent. more on my wage-bill of £70, that is £7, I should have no profit at all, for since out of £10 I have only kept say £5, and have reinvested the other £5, I have only £5 to pay the £7 required to pay

10 per cent. more wages. That would seem to be a hopeless outlook, because it would appear quite impossible ever in the future to improve the position of labour. If that were the conclusion to which I had come, I would not venture to stand up before any audience to present so black an outlook. But fortunately that is not the only answer. The real answer is that an improvement in the position of the workman must come, not from without, but from within. It cannot be accomplished without the co-operation of the workman himself. I am sorry to have to assert that, so far as Great Britain is concerned, I believe that, on the whole, the workmen have resolutely opposed themselves to any such improvement. But my sympathies are entirely with them, as they are in so many cases where their interests and mine appear to be opposed. Every improvement in a process means a reduction of the amount of labour employed. It is obvious that the employer would much rather attack the labour bill than anything else, for it is much the largest of his outgoings. To do this he seeks to put into the hands of his men a better tool. What does that mean? I have ten men getting 30s. a week in doing a particular job. I come down to them one day and say, "I have found a way of doing this a good deal cheaper. Only five men will be required. I am perfectly ready to pay rather more than 30s. a week and do away with five of you." I am not at all surprised with the men who say, "We would much rather that ten of us should have 30s. than that five should have £2, and the other five nothing at all." I have always found it difficult to find an answer to that proposition, which would satisfy those to whom the proposal is addressed, because the question requires the element of time. It is true the operation I am going to perform is a good economic one. But for a short period it will or may produce unfortunate results for the men employed, though in the long run everybody concerned is bettered by it. Let me take an example from my own experience. When I began to make pig iron, the labour at the blast furnace was about 6s. a ton. The labour is now about 3s. a ton, yet every man working at the furnace gets well on to twice as much as he got 60 years ago, and I have got ten times as many men working, because I am making much more iron. That is the net result of the improvement of a process, and in that way alone can improvement be justified.

I have been speaking of the iron trade, and I have given you the

figures with regard to it. I want to give you another group of figures, those relating to the railways of this country. In round figures, every year we ironmasters turn over our capital once. I was speaking in New York some time ago, and I surprised members of the trade then by telling them that. They told me that in the steel industry in America, they turned their capital over about once in three years. My gross income, therefore, is equal to my capital. Of every £100, £10 is profit, of which about £7 I keep, and I put back £3. Of the remainder I pay £70 for labour. It is obvious, therefore, from the figures I have given, that the margin out of which to pay additional wages is very small.

The railways of Great Britain turn their capital over about once in eleven years. Their gross proceeds are divided in round figures as follows: two-thirds for working expenses, and one-third for interest on capital, including debenture, preference, and ordinary stock of all kinds. That is to say, out of each £100, £66 goes to pay prime charges, and £33 to pay interest on capital. Of the £66, in round figures, the railway company pays to persons in its own employment about £33, and indirectly it pays to workers employed by other parties about £16 more. Probably about 50 per cent. of its total outgoings goes in wages. About 16 per cent. goes to pay fixed charges, *i.e.*, debenture interest and preference dividend, which though dependent on the profits earned each year, does not vary with the profits. Thus, there remains 16 per cent. in the hands of the ordinary shareholders. If you work these figures out you will find that for every 10 per cent. you add to wages you must take off about 20 per cent. from the dividend of the ordinary shareholders. The railway companies have for the last 20 years or so had great difficulty in raising additional capital. What is going to happen if you compel the companies to pay higher wages? You will simply not succeed in obtaining capital. I was much struck by a remark which fell from Mr. Thorne, namely, that we could not expect an employer to carry on his business for nothing. Many of those who speak on his side grudge all return on capital. I am glad to note he does not take that view, which would militate so greatly against those for whom he speaks. It would suit nobody that the railways should carry on their business for nothing, because they would not be able to raise the capital to give the increased facilities which the growth of the country demands from the railway,

and deprived of these the industries of the country would cease to progress.

The distribution of wealth is much too large a subject to enter into now. Whether it is possible to divide the gross income of the country between the various participators in the work of production is a problem that has occupied the attention of economists for years. But Mr. Thorne has quite underestimated the share of the working classes in the national income. He said they did not get half of the gross revenue. So far as my knowledge goes, I agree with him that the total revenue of Great Britain may be said to be about £2,400,000,000 a year. But, unless I am very much mistaken, persons who are earning daily wages, including all who are employed in superintendence, but not those earning the higher salaries paid for management, get very nearly, if not quite, one-half of that amount. If that is so, then his needs are satisfied. But I hope he is not satisfied; because he and I, though we sit at opposite sides of the table, do not really differ. We are at one on this point, that we both desire to see labour get its full stint of remuneration, provided that in return it gives its full stint of effort. That is all we are asking on the one side or the other. If we can get that from one another, if we can be persuaded that each of us only desires that, then I do not doubt that these meetings of employers and employed for the purpose of compulsory conciliation (and I accept the expressive bull involved in the phrase) will have the desired result, if not in altogether allaying, at all events in reducing to reasonable proportions, the unrest which we are here to discuss.

PROFESSOR L. T. HOBHOUSE

The field to be covered by the proposed committee is clearly a very wide one. The study of industrial harmony seems to involve the whole of economics and indeed something more. For by economic harmony we must understand a system under which each individual, by putting forth his best energies, serves the common life, and in so doing, and only in so doing, obtains the stimulus to continue his energies and the means of maintaining them. To establish harmony in any such sense as this is to deal with the whole question of economic justice. To investigate the subject is to deal not with facts alone but with a sphere in which facts and ideals come

into contact. The inquiry would be full of fruitful possibilities, but its fruitfulness depends upon a clear recognition of the two sides of the problem, that is to say, on keeping the questions of fact and the questions of right distinct. It is quite possible for people to reach agreement as to the actual result of given causes and yet to put a very different value on these results, so that some would see harmony and justice where others saw disharmony and inequality. So much depends on the ideal which operates, perhaps consciously, perhaps rather at the back of the mind, in passing judgment on all social arrangements.

I am moved to make these rather abstract remarks largely by things which have been said earlier in the course of the discussion. There has been a tendency, I think, to insist upon the actual harmonies to be found in the economic world as it works at the present time. Without denying that some elements of harmony are discoverable in any system that succeeds in operating, my feeling is that this is a case in which the good is the worst enemy of the better. At any rate, the most insidious obstacle to the establishment of a more harmonious system is an over-insistence upon such elements of harmony as have been actually realised. It may be granted that in some respects the interests of all parties in the industrial bargain coincide—for example, it is in the ultimate interest of both employers and employed that production should be increased and that improved processes should be adopted—but we must beware of generalisations which would lead us to take too smooth a view of a tangled situation and to infer an ultimate identity of interests in every case. I confess it appeared to me that Sir Hugh Bell, in one or two passages of his exceedingly able and interesting speech, leant towards what I would call too easy a view. When, for example, he suggested that the increased wealth of the employer was ultimately for the good of the workman, he seemed to be reverting to a rather old-fashioned type of argument which I had supposed to have disappeared from the arena of economic debate. If, as seemed to be tacitly admitted, we have in our industrial production a system in which, where a business succeeds, one man becomes rich while all the rest remain poor, it is difficult to think that the harmony of that system will commend itself quite as forcibly to the many as to the one. Sir Hugh Bell found a justification in the fact that the rich man can save and by saving develop his business and add to

the numbers in his employment ; but would anyone contend that saving, to be effective, must pass through the bottle-neck of the rich man's possession ? A socialist might reply that the community was no less capable of saving than the individual ; or a Trade Unionist might urge that if wages rose above the minimum necessary for the standard of life, the workpeople themselves might contribute more to the accumulation of capital. In point of fact, in proportion to income, it is probably the man of moderate means who saves most. And whatever else may be said for great inequality in the distribution of wealth, the argument, from the necessity of accumulation, seems a most doubtful one.

Again, when Sir Hugh Bell gave figures to show the large proportion of the cost of production which already goes to labour, and drew the conclusion that the margin available for any increase must be small, was he not, for the moment, disregarding the time factor, to which, at other points of his argument, he invited our special attention ? The workman would be inclined to say that if you increase wages you might thereby in time operate upon prices. The particular price of steel holding at any given moment is not a sum fixed by immutable decree, but is subject to increase or diminution in accordance with the movement of all the conditions acting in the market. One of these conditions is the cost of labour, and one of the forces affecting the cost of labour is the demand of the workpeople themselves. Thus, if prices limit wages, it is no less true that wages react on prices. No doubt the question whether a rise of prices would be possible, depends at any given time on complex conditions involving the whole position of the market both at home and abroad. Owing to this complexity and to the vast area over which economic forces interact, it is always easy to argue against the possibility of large changes at any given point. If you take any industry by itself and regard the price of its product as a fixed quantity, you can always show that the margin for a possible increase of wages is very small. But this is no valid argument against the possibility of a general increase in the share falling to the manual workers in industry, since such advance, if continuously pressed, must effect a gradual re-arrangement of the scheme of distribution, and therewith of the rates at which commodities are exchanged for one another. The argument from the impossible has been used against every improvement of the

workman's position in the past, and has been constantly disproved by the event.

I find myself, therefore, in agreement with Mr. Thorne that, in any systematic examination of this subject, we are brought up against far-reaching questions of the distribution of wealth and the organisation of industry. The ultimate subject of the inquiry is the nature of economic justice—the possibility of an economic ideal which can be consistently applied, and of machinery to organise its application. The inquiry is one in which the investigator will court failure if he sets out merely to discover how existing disagreements may be smoothed over. Its true object is to form a reasoned ideal of justice in economic distribution, applied through the ascertained operation of economic cause and effect, to the concrete facts of our industrial life.

COUNCILLOR JAMES JOHNSTON, J.P.

Discontent is rife amongst the workers: of this we have had many illustrations during the last twelve months, a period in which it was more necessary than at any previous time that industrial harmony should have prevailed, in order that the whole of the community could have worked together to defeat the common enemy. Great changes are imminent in the industrial world; the war has emphasised this, and therefore it is a common and universal duty to help to avoid a disastrous upheaval. Labour unrest is due almost entirely to the great contrast in the position of the wealthy and the poor. In ten years there has been an increase in the wealth of the income-tax paying class of £190,504,000. 11,800 persons are returned as receiving £149,000,000 in 1912-13. Out of our total population of about 46,000,000 people 139,000,000 are not liable to income tax, that is, they receive less than £160 a year each. Thirty-two per cent. of adult wage-earners are in receipt of less than 25s. a week, and a large number of general labourers have less than £1 a week. Throughout the United Kingdom there are about one million agricultural labourers whose wages average 17s. 6d. a week. The increase in the cost of living has brought these men nearer to the margin of destitution than they were ten years ago, and low wages, bad conditions, especially bad housing, undermine their personality, independence of mind, and freedom of will.

The work of Trade Unions has helped enormously in bettering

¹ This figure includes married women and children.—Ed.

the conditions of the skilled workers, and, in more recent years, the condition of the unskilled, but they would add enormously to their value and power by using their surplus capital and skill in establishing co-operative workshops for the employment of their members, thus reconciling the conflicting interests of capital and labour in industry, and enabling their members to realise, and practise, that "It is only by creating wealth that we create the means to pay for work. The more wealth we create the more we can pay for." The establishment of old age pensions and of Wages Boards and National Insurance has materially improved the conditions of the aged poor, unemployed and poorly paid workers, but, after all, these useful and beneficent measures are only palliatives, and we must dig deeper to secure equity and justice for all. Palliatives are no cure. Destitution should be stamped out. There should be a national minimum of wages, housing, leisure, and education. The establishment of a Co-operative Commonwealth in which every one shall take his share in the work of the community, and the wealth produced shall be distributed "to every one according to his need" must be our ultimate object.

The late Bishop Westcott, in an address at the Middlesbrough Co-operative Congress in 1901, clearly expressed in a few words the necessity for better conditions in industry. He said: "While we rejoice in the various advances towards our goal, we cannot acquiesce in anything short of the ideal of production itself, that all who combine in a business should be partners in it, partners in the contribution of capital, partners in profit and loss, partners in control and development, partners in responsibility and honourable pride; a position which must tend to bring out unfailing support to vigorous labour and untiring thought and glad devotion to social service, or, in other words, a man's full reward in elevation of character. apart from any financial advantage, for a man's full work. . . . We believe in advocating these principles, we are pleading for the just rights of workmen, rights which will make nobler citizens, clearer brains, and an intelligent community, making men more independent and far more equal."

Co-operation is a principle essential to the maintenance and development of civilisation, and its underlying principle is that the individual, in promoting the well-being of the community, will, with greater certainty, promote his own. This differs essentially

from the doctrine of the individualist, namely, that by leaving each individual free to pursue his own advantage there will result the greatest good to the greatest number. Co-operation seeks not the elimination of property, but its extension to all by collective ownership, thus giving to every citizen the ethical value of a man of property. It is an economic movement founded on a moral basis, aiming at the substitution of the destructive system of unlimited competition by the life-giving method of co-operation.

The beginning of the Co-operative Movement was largely due to the teaching of Robert Owen, who spent some of the early years of his young manhood in Manchester at the end of the eighteenth century. He married the daughter of a wealthy millowner, Mr. Dale, and was sent to New Lanark to manage the cotton mills there in 1799. He was a partner, and took charge on the condition that he should be allowed to make changes in the social and industrial conditions of the workers, undertaking to make sufficient profit to pay interest on the capital held by the other partners. From the date of his appointment until he resigned in 1825 he was able to fulfil his undertaking, at the same time greatly improving the condition of the workers by the payment of better wages, reducing the hours of labour, providing rooms for cooking meals, establishing schools for the children of the workers—"the downtrodden, dirty, half-civilised beings whom he found employed at New Lanark in 1799, so that the most hopeless persons became under encouragement moral, intelligent, and happy." He advocated the provision of good housing conditions, the limitation of working hours to eight per day, and a *fixed rate of interest on capital*, not exceeding 5 per cent. He established the first co-operative store, to supply his workers with pure food and other necessities of life at the lowest possible cost, and this led to the establishment of similar stores in various other places in the United Kingdom; but the great development of distributive co-operation did not begin until 1844; when some weavers (students of Owen's teaching) at Rochdale established the store that has developed into the great system of co-operative distribution we have with us to-day. They adopted Owen's principle of limiting the interest on capital to 5 per cent., but sold their goods at the same prices as the ordinary shopkeeper, distributing the surplus left, after paying all expenses in carrying on the business, to the members in proportion to the amount of each

person's purchases. They also instituted a system of cash trading as a system of credit was rife which placed the worker in the power of the shopkeeper. This important change made co-operative distribution a great success, and the system spread over the greater part of the country. In adopting this plan the Rochdale Pioneers had in view not only the supply of pure goods to themselves at a reasonable price, but the accumulation of capital to be used for self-employment, the purchase of land on which their members could be employed to produce food, the provision of temperance hotels and clubs for social and educational purposes, and, eventually, a complete reform of the then existing bad industrial and social conditions, by the establishment of a Co-operative Commonwealth, in which monopolists, combines, and trusts, with their power to exploit the community by cornering raw material, regulating production, holding up supplies, and so being able to charge exorbitant prices, would be abolished.

Owing to the threat of a boycott by wholesale provision merchants at the instigation of private traders, it was found necessary to establish a Co-operative Wholesale Society, with its headquarters in Manchester, in 1863. This was formed by each existing society contributing towards the capital of the Wholesale Society in proportion to the number of its members, and their votes in the election of a committee to manage the Wholesale Society were also in proportion to the number of members. The Wholesale Society confined its attention in the first instance to placing buyers in producing centres, where the needs of the distributive societies could be best provided for, but in a comparatively short period productive workshops were established to supply other goods to the distributive societies, and the figures on page 47 show the enormous development of the Co-operative Wholesale Society since its foundation in 1863.

There is also a Wholesale Society with its chief offices and works in Glasgow for supplying the societies in Scotland.

The co-operative movement has 84,989 workers engaged in distribution, and 63,275 in production. It contributes out of its surplus £113,226 for co-operative educational purposes, and £129,175 for charitable purposes.

The general progress of the co-operative movement is shown by the annual returns of the Co-operative Union for 1914. Number

of societies in United Kingdom, 1,510 ; members, 3,188,140 ; share and loan capital, £58,704,695 ; trade, £138,472,025 ; surplus, £15,204,098.

CO-OPERATIVE WHOLESALE SOCIETY, LIMITED

No. of C.W.S. Productive Works	50
„ Employees in Productive Works	over 18,400
„ Working Hours per week	various, 43½ to 53½

Minimum Wage of Unskilled Workers—

(a) Females—The following minimum scale rate is in operation, viz.—

Age .	14	15	16	17	18	19	20
Wages	5s.	7s.	9s.	11s.	13s.	15s.	17s.

(b) Males—A minimum wage of 24s. per week is paid to all adult employees of 21 years of age and over. In the majority of cases, however, this rate is exceeded.

Skilled Workers and Trade Union minimum.

The rule laid down by the C.W.S. Committee and strictly adhered to is, that wherever Trade Union Rates of Wages are in operation such rates shall be recognised as a minimum, and in all Trades where no Trade Union Rate is in operation, a generous standard is fixed on the basis of the conditions obtaining in the district.

NOTE.—In addition a War Bonus is now paid on the following basis, viz., 15 per cent. on Wages up to and including £2 per week, and 10 per cent. above £2 per week up to £200 per annum.

Free Holidays allowed annually Staff Hands, two weeks with pay.

Broughton Shirt Factory	{	(a) No. of Workers, 740
		(b) Average Wage of Female Workers (women and girls), 18s. per week.

In addition to the productive works of the two Wholesale Societies with an output of £11,916,365, there are 108 independent productive societies with an output of £3,800,627 for the year 1914, employing 10,726 workers. The total productive work of the Co-operative movement in the United Kingdom includes 110 societies employing 36,850 persons ; share and loan capital, £5,483,140 ; trade, £17,642,590, and in addition to this amount Distributive Co-operative Societies produce goods—flour, bread, boots, clothing, and so forth—for their members, of a total annual value of £14,550,000, bringing the total to £32,198,589.

Co-operative farming is carried on by the cultivation of about 16,000 acres of land, of which over one-half is owned by the societies. Besides this there are 478 farming societies in England and Wales

affiliated to the Agricultural Organisation Society, with a turnover of upwards of £2,000,000, and work of a similar kind is carried on by agricultural organisation societies in Scotland and Ireland.

About £10,000,000 has been advanced to members of co-operative societies to enable them to build or purchase their own houses, but as practically no control has been exercised, so far as the grouping of the houses is concerned, the result has not been as good as it ought to have been from a social and hygienic point of view. The Co-partnership Tenants have built houses of a total value of over £3,000,000, and have done their building work on Garden City lines, laying out complete co-operative villages with all the amenities for social life, and the rearing of an energetic and healthy population, and on similar lines it is hoped the future housing work of the co-operative movement will be carried on.

There are two systems of co-operative production in operation—co-partnership and federal. The co-partnership system is the outcome of the teaching of the Christian Socialists—1848 to 1857—a small body of men brought together by the Rev. F. D. Maurice to deal with the Chartist agitation for political reform, which seemed likely to result in riots and bloodshed, and to take steps to deal with the sweated conditions that prevailed in the tailoring and other trades. Associated with Maurice were Chas. Kingsley, Thos. Hughes, E. Vansittart Neale, J. M. Ludlow, and others. Thos. Hughes, who was in Parliament at that time, was able to get the Industrial and Provident Societies Act passed (the Magna Charta of the co-operative movement), which gave co-operative and other working-class organisations a legal standing, and it has been of enormous value to the working classes. Mainly through the efforts of Mr. Neale, workshops were established in London on the lines of co-operative workshops established in France at that period, but here they failed owing to the lack of business organisation and honesty on the part of the managers. From this seed, however, there sprang numerous co-partnership works, most of which are now firmly established in this country. They are formed by a number of workers joining together to produce articles under co-operative methods in a registered society, in which the workers are actual partners in the business. Usually a fixed percentage is paid to capital, and the balance of surplus to the workers in proportion to their wages, and in many societies a dividend on purchases is

given to the customers who buy the society's productions. The composition of the committee of management varies, being in some cases composed entirely of workers, and in others partly of workers and representatives from outside bodies who have invested capital in the business.

The federal system is represented by the Wholesale Societies, the capital being supplied by the Distributive Co-operative Societies who are members of that body. After payment of interest on capital and all other working expenses in connection with the federal workshops, the net surplus is returned to the shareholding societies in the form of dividends on the amount of purchases from the Wholesale Society. No part of the surplus is given to the worker ; it goes to the consumer, who furnishes the capital, through the distributive society of which he is a member, for carrying on productive and other works. In both types of workshops Trade Union rates of wages at the least are paid, and the best conditions for the comfort and health of the workers are provided.

The hours in co-operative productive works are generally shorter than in the ordinary workshop, the majority of them being only 48 per week—a great advantage to the workers in giving them opportunity for recreation and so forth.

The shirt factory run by the Wholesale Society is a splendid example of how a *sweated industry* can be run on co-operative lines and give proper wages and more satisfactory conditions to the workers, whilst competing successfully in both quality and price with the private manufacturer. This business was started a little over 20 years ago with about twenty workers, and from the figures already given it will be seen that the number employed is now 740. The average wage of 18s. per week for 44 hours includes those of girls of 14 who are learning the business. During the first month these girls are not paid but are put under one of the expert workers, who instructs them and gets the value of the learner's work during the month. A girl then starts on her own account, but it takes some time before she is able to earn any considerable sum in wages, thus keeping down the average wage. The expert workers can earn 25s., and even more, per week. No deductions are made from wages for hire of machine, thread, and so forth, as is the case in many private works. Wages and conditions in most of the ordinary shirt-making works fall much below the above.

The federal system of production has the great advantage of a practically unlimited supply of capital, and an assured market for its products through its society members, whereas the co-partnership system is dependent on the capital subscribed by the workers themselves or their friends or societies, who are in sympathy with their methods, and as, in many cases, they have to dispose of their products almost entirely in the open market, their rate of progress is necessarily slower than that of federal production.

The results shown by co-partnership productive workshops prove that the workers are able to organise themselves not only in profitable but in poorly-paid industries, and to compete in the open market. It only needs a fuller realisation by the public of the necessity of placing the relationship of labour and capital on such a basis that they may cease to be antagonistic to each other, to bring about a system of industry in which strife will be abolished and peace reign. Under a system in which profits are equitably distributed, and the worker has a large share of the responsibility of control and management, greater economy in production will result. The worker will give of his best, he will endeavour to raise the poorly paid worker to a higher level, and will help to increase co-operative progress in order that it may obtain the means to own the land, the minerals, and the means of transport, so that it may have direct access to the raw material, control prices, and govern output in the interests of the whole community.

MR. G. PICKUP-HOLDEN

It is with diffidence that I have accepted your invitation to speak at this important meeting, and I consider it necessary clearly to state my position. I am not entitled to speak as the representative of any Organisation or Association, and am only expressing my individual opinions as an employer engaged in the cotton trade. I propose to prove that efficient buying and selling have resulted in efficient production, ensuring industrial harmony and national profit; that inefficient buying and selling have resulted in inefficient production, ensuring industrial discord and national loss.

The national profit and loss in the cotton and building industries are the result of their methods of buying and selling (wages). These are based on mutual arrangement (co-operation) between employers

and employed. Cotton operatives are paid for production (output), not for consumption (time occupied). Building workmen are paid for consumption (time occupied), not for production (output). The cotton trade is efficient and expanding ; the building trade is inefficient and contracting.

The cotton industry is the greatest export trade in the Empire. In 1912 its exports amounted to £120,830,000. The factors of production—ability, capital and labour—are available in preponderating quantities in Lancashire. Success has been achieved by the adoption of methods directly opposed to those supported by Lancashire's practical men (employers and employed), and its theorists (the Manchester School of Political Economy).

The employers strongly supported the *laissez-faire* policy ; they opposed interference by legislation, Trade Unions, and standard rates of wages. Their united action was based on a fallacy that reduction of wages reduced losses. The workpeople showed equal opposition to the ultimate causes of their prosperity. They strongly supported the fallacy that reduction of output increases employment. Holding this view, they opposed the introduction of labour-saving machinery.

The policy of the employers in reducing wages to the level of subsistence would not have given increased profits, and it has been abandoned. The policy of the employees in reducing output (by the non-use of machinery) would not have lessened unemployment or increased wages. It, too, has been abandoned in the cotton industry. The theories taught by the Manchester School of Political Economy have also been abandoned.

In 1853, after repeated struggles and disputes between employers and workpeople, the Blackburn list of weaving prices was by mutual arrangement adopted as a standard rate of wages. It was merged, with modifications, into the Lancashire uniform list in 1892. The result of this method of fixing prices has been that in the Lancashire cotton industry there has only been (in 1878, on a reduction of 10 per cent.) one general strike in sixty-two years—1853–1915.

The basis having been fixed it became immediately the joint interest of employers and employed to stimulate production, hence there resulted increased output and higher wages.

The result of this unity of action has been that the cotton trade has gradually gravitated to the centre of high wages. Its supremacy

is the result of well-paid, continuous, and, therefore, efficient labour. This uniform list has one idealistic feature which is unique. Men, women, and "young persons," trade unionists and non-trade unionists, are all paid alike.

The adoption of this method of fixing prices, directly opposed to the teachings of the "Manchester School," has proved one of the chief factors in developing the Lancashire cotton industry. It is the permanent basis of our efficiency and industrial harmony.

It may be considered that undue preponderance has been given to the view that development has been effected through the rejection of the Manchester School's theories. But an examination of the condition of the cotton industry in America, where the policy of the Manchester School has been adopted, will tend to prove the truth of this statement. As a member of the North-East Lancashire Employers' Association Commission, to investigate possible danger from American competition, I visited the cotton manufacturing States in 1901. We found splendidly equipped mills, the latest machinery, automatic looms in advance of Lancashire, a home market rigidly protected; large units of production (the Amoskeag Mill, at Manchester, New Hampshire, contained over 11,000 looms, with 350,000 spindles)—all the essentials for efficient production, and to Lancashire, dangerous competition. We decided, however, after consideration, that, with the exception of coarse goods, in which cotton is the predominant factor, and labour of relatively less importance, Lancashire was not endangered by American competition. The factor which prevents Americans from successfully competing with Lancashire is that they have adopted the Manchester School's economic doctrines. They purchase their labour on the basis of supply and demand, fixed by competition. In times of trade depression the remedy, reduction of wages, is readily enforced. Reductions of 20 to 30 per cent. in weaving prices have been effected. The conditions of labour predicted by the Manchester Economists we found in fullest operation in the Southern States, the former home of slavery. The "law," reducing wages to the bare level of subsistence, was in full force. We found weavers running ten automatic looms for less than 10s. per week. They were paid 6½d. per piece for weaving on automatic looms, whilst Lancashire was paying 2s. 4½d. for exactly the same production.

In this district the manager said : " There are no labour laws, no school laws ; but most of the mills in North Carolina, by common consent, observe a sixty-six hour week, and they would rather not employ children under 12 years old."

Day and night work was arranged as follows : The day shift worked from 6 a.m. to 6.40 p.m., with forty-five minutes' interval for dinner, except on Saturday, when the hours were 6 a.m. to 12 noon. The night shift worked from 6.40 p.m. to 6 a.m., with only fifteen minutes about midnight for refreshments. The manager said that if a longer rest were given, the hands would fall asleep. One set of men, women, and children always worked by day, and the other set always by night. In Augusta between 500 and 600 children, from 5 to 10 years of age, were employed in the cotton mills. We were back in the " good old times " of Manchester, in 1820-1840.

These mills, in some cases splendidly equipped, were paying, if any, very small dividends. One magnificent new mill we visited, with a capital of £500,000, was shortly after our visit in the hands of the liquidator. America will only become a dangerous competitor when she drops completely practising the theories of the Manchester School.

The Manchester School poured ridicule and contempt upon an idealist who attempted, in 1860, to state his opinions on economic truth. John Ruskin, in *Unto this Last* (p. 19), wrote—

" In this ultimate sense the price of labour is indeed always regulated by the demand for it ; but, so far as the practical and immediate administration is regarded, the best labour always has been, and is, as all labour ought to be, paid by an invariable standard. ' What ' ! the reader perhaps answers amazedly : ' pay good and bad workmen alike ? ' Certainly ! "

My own principles of Political Economy were all involved in a single phrase spoken three years ago in Manchester, and are all summed up in one sentence in the last volume of *Modern Painters*— " Government and Co-operation are in all things the laws of life ; Anarchy and Competition the laws of death."

Ruskin's theory of a standard rate was denounced as impracticable by theorists. It had already been put into successful operation by practical men, and has been the great factor in producing efficiency and national profit.

The great success of the cotton industry has been due to the fact that it has adopted the whole of the law of life taught by Ruskin. There is government and co-operation. Strong united associations of employers meet equally strong united associations of operatives. The operatives, many of whom hold shares in their mills, recognise the force of government by ability, and knowing that their wages are increased by increased output, they support new methods, new machinery. The result is : increased production, greater efficiency, industrial harmony.

The building trade's inefficient buying and selling, producing inefficient production, results in industrial discord and national loss. The workmen in this industry are paid on a fixed basis—a standard rate of wages. This rate has been fixed by co-operation between masters and men. Wages are paid for time consumed, not for output. The workmen still retain the fallacy that reduction of output increases employment. They refuse to accept the conditions which have made Lancashire successful. A brief examination of the costs of production will prove the inefficiency and show the resulting national loss. Statistics giving cost of production for the past thirty years in the building trade are as follow :

The number of bricks laid per day in plain walling in 1885 was 1,200 to 1,500 ; the number laid in 1912 was 550 to 650. The number laid in 1914–15 has been as low as 450. Two employers informed me that they have repeatedly, for days together, working on their own account, each laid 2,500 bricks daily.

The cost of this policy of decreased output is as follows :

A block of cottages erected in 1885 cost for nine-inch brickwork (labour only) 8½d. per square yard : bricklayer, 9d. per hour ; labourer, 6d.

In 1912 exactly the same labour cost 1s. 9d. per square yard of nine-inch brickwork : bricklayer, 10d. per hour ; labourer, 7d. per hour.

	£	s.	d.
Based on 20,000 sq. yards (8½d.)—			
Cost of labour was in 1885	708	6	8
Based on 20,000 sq. yards (1s. 9d.)—			
Cost of labour in 1912	1,750	0	0
Increase in wages amounted to	98	3	0
National Loss due to restricted output	943	10	4

A weaving-shed built in 1882—

(a) Stone cost per cub. yard 6s. 6d. ;	£	s.	d.
12,064 cub. yards at 6s. 6d.	3,920	16	0
(b) An identical shed built in 1912 cost 13s. per cub. yard	7,841	12	0
(a) The material in 1882 cost (stone) 3s. per yard, (mortar), 6d.—total 3s. 6d.. . . .	2,111	4	0
(b) The material in 1912 cost (stone) 5s. per yard, (mortar), 1s.—total, 6s.	3,619	4	0
The cost of labour in 1882	1,809	12	0
The cost of labour in 1912	4,222	8	0
Advance of 1d. per hour amounted to	263	8	0
National Loss due to restricted output	2,149	8	0

The consequence is that operatives throughout Lancashire before the war, in 1914, were waiting for cottages. Bricklayers and stone-masons were in large numbers unemployed. Some large firms have only been regularly employing one-quarter the number of their former workmen, and these men are paid—also upon a fixed basis of prices not affected by competition—a standard rate of wages fixed by co-operation between masters and men. Apparently, Ruskin's theory of co-operation is as great a fallacy as are those taught by the "Manchester School." A close examination of Ruskin's statement proves its absolute accuracy. Ruskin does not state co-operation is the law of life. His statement is—"Government and Co-operation are the laws of life."

Dealing with the last great building strike in London (May-June, 1914), the *Building News* states :

"The men know that out of the 5,000 Master Builders in London only 3 per cent. belong to any Masters' Association."

Its workmen will not recognise the force of governing ability, and refuse to have any effective government. Their foreman must be a member of their Trade Union. Any attempt by him to increase the production is strongly opposed. If he persists in attempting to increase production he is brought before the local Lodge and warned. If he continues his exertions he is brought before the local Lodge and fined, until his efforts for efficiency are broken. The use of machinery and machine-dressed stone is restricted by absurd regulations. The only united effort of the employers appears to be to pay the same rate, and to resist advances, of wages. The one ideal of the workmen appears to be to receive the highest wages, but to give in return the least production. The result is that the production in brick-laying has decreased from 17 yards in 1885 to $7\frac{1}{2}$ in 1912 ; from

7 cubic yards in stone-walling in 1882 to $3\frac{1}{2}$ yards in 1912. To leadership, conciliation, and arbitration the building trades have shown equal opposition. As a consequence, the building industry is inefficient and contracting, and the result is national loss.

REDUCTION OF WAGES IN THE COTTON INDUSTRY

In 1878, after a bitter struggle, in which, in my opinion, the defeat of the workpeople was caused by anarchy—the burning of the house of the Chairman of the Employers, near Blackburn—the operatives accepted 10 per cent. reduction.

Really a reduction of wages produces further depression. Reduction of wages reduces consumption, because the operatives, receiving less wages, have a reduced purchasing power, and Lancashire's home trades suffer. Reduction of wages tends to increase production, because operatives attempt to earn the same amount of wages by increasing their output. If reduction of wages is necessary on account of either diminished demands, or increased stocks, increased production will still further glut the market, producing a further depression in prices.

An examination of the result of the 10 per cent. reduction in 1878 proves that reduction of wages is no remedy.

A manufacturer with 1,000 looms pays weekly, on 6s. per loom basis, £300; annually, £15,000. On this a 10 per cent. reduction is £1,500. The cotton business is transacted in many cases with a floating capital not exceeding £10,000. If the manufacturer secured this reduction his gain is £1,500 annually on £10,000, or 15 per cent. per annum. From 1878 to 1883, five years at £1,500, equals £7,500—in addition to any ordinary profits earned. In reality in 1883 the losses had been such that the employer was compelled to secure a further reduction of 5 per cent. If he had secured a reduction of 50 per cent. he might have been ruined. The mill in the Southern States, working at a reduction of 75 per cent. on Lancashire's price, went into liquidation!

The cotton industry, with efficient buying and just selling, whereby full value is produced for wages received, has expanded, and has provided additional employment for both capital and labour. Its efficiency produces national profit.

In the building industry, inefficient buying and unjust selling, whereby half value is produced for full wages received, have produced unemployment for both capital and labour. Inefficiency produces national loss

In 1897, when a depression in trade caused the employers to suggest a reduction in wages, an attempt was made to prove that the low wages on the Continent, the lower wages in the East, India and China, could not compete with Lancashire: India and China are still our greatest customers.

Really the only competition was amongst ourselves, and it was proving disastrous. It is this competition which should be reduced, not wages.

The first proposal made to diminish competition was to issue an official market report similar to that published at Liverpool. This would be composed from daily returns of total sales in sterling, giving daily sales. The second was that these daily returns, amplified, would each contain all the details and prices of every transaction. From these prices received, the Central Association would fix a minimum rate, which manufacturers would agree to maintain.

Other proposals were as follows:

That every manufacturer should permit his books to be examined, to prove any breach of this agreement.

That in case of breach of agreement, by accepting lower prices than the officially fixed minimum, the offender should pay the difference to the Central Association, or pay a fine or be expelled.

That there should be government by a Central Association, and not anarchy, existing by unrestricted individualism.

That co-operation with all Manchester merchants should be attempted in fixing prices, as in labour.

That as we, as employers, buying a commodity, had found it ultimately to our interests to keep it at a non-competitive price, they would find, ultimately, the same result: steady prices, lessening risk on stocks and shipments, also lessening competition.

That co-operation should be further extended to our workpeople: federated employers to employ only federated workmen; federated workpeople to work only for federated employers.

That on the improvement of trade the ten per cent. deducted would be given to the operatives.

That out of this advance $2\frac{1}{2}$ per cent. on every 10 per cent. paid would be deducted.

This would be paid to the Central Employers' Association.

Had this been adopted, the income from the 450,000 looms in the North-East Lancashire Association would to-day be—on

advances already paid, 15 per cent.—£210,000 per annum. This sum would be absolutely the employers' property; it would be available as a defence fund, to resist unjust demands by either workpeople or customers; it would enable them to return, if desired, to every member remaining faithful to the Association, £450 per annum for every 1,000 looms.

One Central Sales Association in cotton (Coats') is an undoubted success. Their profits are published and have amounted in one year to over £3,000,000. This is more than Lancashire's 750,000 looms have realised in either 1911, 1912, 1913, 1914; to-day (1915) there is an absolute loss.

An estimate of the increased prices secured by Central Sales Associations is not possible. Economists are not able to calculate the increased prices secured for labour by Trade Unions. Their minimum gain may be safely estimated at 3 per cent. Three per cent. on £120,000,000 would realise £3,600,000. This would afford for Lancashire manufacturers a just profit on 750,000 looms, and I am confident would give general satisfaction.

MR. ALFRED EVANS

Mr. Alfred Evans, the General Secretary of the National Union of Printing and Paper Workers, said that at the bottom of the existing unrest was the deep impression that prevailed among the workers that when the war was over the employing class would take advantage of the chaos in nearly every industry to filch away from the workers the benefits they had been able to win for organised labour during half a century. That was one of the root causes of the present unrest. The workers of the country were anxious to do everything they could to help the Government to bring the war to a successful issue. Labour had done its full share and was prepared to do its full share of the work that remained to be done. Upwards of two and a half millions of workers had answered the call to the colours. But Trade Unionists were anxious that when the war was over and when the men came back, they should not return to find their positions taken up by underpaid labour; that they should not have been worsened in their circumstances for having given their services voluntarily and freely for the benefit of their country. In the railway and tramway industries and in the

workshops, women were being daily employed to do men's work. There was justification for that. He was not opposed to the employment of women merely on the ground that they were women. In the organisation which he represented there were nearly 14,000 women. They were out to uplift working women throughout the country. What they did object to was women being employed to do the same work at lower wages than men. If the woman was able to do work which a man had been doing, she should not be used to reduce the standard of living or to break down the standard prices in any industry. He hoped the members of the British Association would use their influence to prevent women from being made economic slaves and from being used to reduce the price of labour. In many towns in the United Kingdom the average wage of women workers was not more than 9s. a week. Although the men through their trade organisations had been able to get war bonuses, a surplus of woman labour had prevented the women from getting any increase of wages and many of them had been thrown out of work. The position of the woman worker was a scandal. Some people said we wanted more Trade Boards ; but he thought these Boards had been a ghastly failure. The Board for the box-making industry had fixed 3d. per hour as a living wage for girls. It was not even quite as good as that : most of the workers were on piece-work, and under the regulations of the Board, if an employer could show that 85 per cent. of his workers could earn 3d. per hour on the rate paid it was considered to be satisfactory. There were many women, therefore, who did not earn the 3d. per hour through the week. He had a strong impression that the end of the war would not mean a big influx of labour back from the battlefield into the workshops. He did not think we were going to achieve such a victory as would enable us to do without a large standing army. We might have to be in a position to put three million men in the field at any time. That would mean that the women workers who had been introduced into various trades would stay in them. It was, therefore, a duty to see that these women were not exploited, and the best way of ensuring that they were not, was to organise them in Trade Unions. There was one bright spot in connection with the employment of women, and that was Lancashire, where, in the textile industry, they were paid equal wages with men for equal work. That was due to the fact that they were organised in the same Unions with the men,

and unless the Trade Unions realised their duty and undertook to protect and safeguard the interests of the women workers, who had, for the first time been introduced into so many trades, the end of the war might see us faced with an industrial problem that would be as serious as the war itself, and have far-reaching effects upon the whole community.

THE REV. P. H. WICKSTEED, M.A.

I cannot take a very cheerful view as to the likelihood of unstrained relations between employers and employed in the near future, for beneath the many encouraging indications there lie stubborn forces that make for conflict, though we may hope, not for bitter hostility.

To begin with, the tone of personal respect which the leaders of both sides who have met each other face to face in industrial disputes invariably adopt (so far as my observation has gone) in speaking to and of each other, and which we have seen exemplified in our debate to-day, is of happy augury ; but at the same time it is easy to see that there is beneath it all the exertion of a strong mutual pressure in which each side is endeavouring to convince the other of something it is unwilling to see, and failing that to push it somewhere where it is unwilling to go. And the real trouble is that there is a deep and perfectly genuine intellectual cleavage as to the meaning and concatenation of the main factors of industry, let alone the difficulty of ascertaining the specific facts or estimating the probabilities in any special case. In other words, there are no clearly defined and generally accepted elementary principles of economic and industrial science ; and therefore no one can speak with authority on the controlling forces which underlie any given situation.

For the conditions under which an expert opinion can acquire compelling force are broadly these : There must be a general acceptance of the first principles upon which the expert works, and there must be an assured faith that he has the power and the training which enable him to pursue those principles in their applications and implications further than the rest of us can do, that he exercises that power in perfect sincerity and honestly gives us the results of his investigations.

Now in the case we are considering none of these conditions is fulfilled. Whenever a speaker touches incidentally upon questions of economic theory in this room—that is to say, be it understood,

reveals his conception of the fundamental facts with which he is dealing—he is sure to fall into what half his audience regards as an economic fallacy ; and perhaps any two of us would agree that this morning's discussion has bristled with economic fallacies ; only when either of the two went on to specify which they were, the harmony would at once be broken ! It would be an enormous gain if this chaos of honest opinion could be in any degree reduced to order ; and much may be hoped from such agencies as the Tutorial Classes in which men accustomed to disinterested intellectual investigation meet men in daily contact with hard facts, and both are actuated alike by the sincere desire to understand.

But we must not expect too much from such investigations. The problems themselves are in the highest degree complex, and it is almost impossible to prevent men's wishes from warping their judgments when they are engaged in investigating them, or in applying the principles they accept. Take an instance from the field of sociology rather than economics proper. It is possible that most of us in this room might acknowledge the profound significance of Auguste Comte's remark that the twofold use of the word " People " in all the Western languages to signify indifferently the whole nation or the proletariat, is an instinctive recognition of the fact that the unprivileged masses are the real body politic, and that the privileged classes must be either their organs or their parasites. If we accepted this principle we should agree that the very existence of the capitalist or the employer must look for its social justification, if it is to have any, in its utility as an organ of the proletariat, for whose weal it exists. And this apparently was the line that Sir Hugh Bell took in his delightful paper. But this helps us only a very little way. For suppose we all of us entered upon an investigation in perfect agreement as to the principle, would not some of us *wish* (or what is almost equally bad, be suspected of wishing) to find out at the end of our inquiry that the capitalist and directing organs were of extreme importance and should be cherished, encouraged, and developed—always in the interests of the proletariat—with the utmost care and generosity ; and would not others of us wish that they should turn out to be of quite subordinate importance, owing whatever significance they may have to faulty organisation, and marked out for speedy elimination ? Now where there are, or are supposed to be, such marked differences in desires it is very

difficult not to believe that they influence opinions. We have had some very frank speaking to-day on the subject of the value of the defence of the present distribution of industrial revenue, on the plea that it accords with the true interests of the workers ; and it is no secret that the leaders and representatives of the working classes, who have been directly and expressly evolved as organs and nothing more, of the rank and file of their unprivileged associates, are hardly at liberty to be convinced on any point of fundamental importance that runs counter to the wishes of their clients, and are under constant danger of the suspicion of conscious or unconscious desertion of their true organic functions, and of slowly transforming themselves from organs into parasites of the body to which they are attached.

But yet after all, however much we may desire that this or that should be the fact, or however much we may be convinced that it is so, we have no *wish* to break our heads against the facts because we don't like them ; or to nurse delusions because it would be nice if they were true. We all really want to know the facts if we can, for we are always dealing with them and nothing else ; for, whatever we may think, we see nothing, but the facts are there, and it stands to reason that we can better deal with them if we see them than if we see something else instead of them. Strikes and lock-outs are a desperate attempt to get at the facts, when argument and negotiation have failed to bring about a sufficient approximation of opinion as to what they are ; and it has been brought out again and again to-day that in the cotton trade—where for a variety of reasons the facts are more widely and precisely known than in any other great industry, though there are constant rumours of war—it has come to be an almost fixed belief that there will never be war *à outrance*, because each side knows that the debatable margin, though worth getting, is not worth fighting for.

For what then may we hope ? I think for this : That while discussion and investigation go on on every side, and unremitting attempts are made to establish at least some elementary principles of economics that may win or command universal assent, while personal respect may be increased by personal relations on boards of conciliation, and even in conferences between avowed opponents, while legislative and industrial experiments are being made and publicity of relevant facts sought rather than shunned on all sides,

there may arise a strengthened feeling that behind the struggle of wills and the diversity of desires, there are certain controlling facts and principles which are imperfectly understood and which it is of supreme importance to understand better. That will not prevent strikes and lock-outs, but may it not lead to the perception that in their essence they are really only one, and that the least desirable of a number of methods of investigation, in which there may be something for the two sides to contend for against each other, but in which there most certainly is something—and that something of supreme importance—for them to find out together? That would be no small gain in itself, and it would hold in itself the seeds of yet far greater gains.

MR. ALFRED SMALLEY, J.P. (BOLTON)

In the consideration of Industrial Unrest he was in an exceptional position, as at ten years of age he was working as a half-timer, had been Secretary for ten years of a Trade Union with nearly 20,000 members, and was now head of a Labour Department of one of the largest syndicates in the City of Manchester.

Whilst he agreed that Co-operation had many good features, he did not consider it would create industrial harmony, and pointed out that the Co-operative Employees' Trade Union was one of the strongest in the country, a fact which indicated that such employees considered it necessary to organise in their own interests on the same basis as those employed by private firms, whilst strikes frequently occurred in co-operative workshops.

He was of opinion that one of the most important causes of labour unrest was the increased knowledge of the workers arising from the facilities of the Education Act of 1870, and the subsequent Free Education Act, etc., but as the education of the masses of the workers was imperfect they took narrow views of their position, and until the mental development which was now in progress had been further advanced, he was afraid there would continue to be unrest. He recognised that much of the unrest was justifiable, and we need not be afraid of it, if only it could be directed into the right channel.

It was an admitted fact, that where labour was unorganised, wages were low, and generally the conditions of employment bad. In this connection, too, it should be remembered that the membership of Trade Unions, as shown by the Trades Congress Reports, and

the Board of Trade Returns, had during the past few years increased by 200 to 300 per cent. A large number of the added members were working under adverse conditions, and what to the general public had appeared an industrial upheaval had been the attempt to bring about uniform wages and conditions, which was a very desirable and urgent project.

Much of the agitation, however, which brought about recent troubles had been caused and fostered by irresponsible men who, with revolutionary views, formed the extreme, and aggressive section of the Unions, and as the policy of most Unions was decided by not more than 5 per cent. of its membership, it would be seen that the more reasonable men were too apathetic, and had allowed themselves to become involved in labour troubles against their better judgment. Much misguided unrest would be avoided if such men took a keener, and more active interest in deciding their own policy.

He would like to see set up to deal with disputes some machinery which would obviate strikes and lock-outs. But he was certain that the mass of the workers were not prepared to accept compulsory arbitration, which they viewed with suspicion, because compulsory arbitration also meant to some extent compulsory labour if effect was given to the awards of arbitrators.

In the mind of the average working-man it was not possible to secure an arbitrator with the necessary knowledge of a particular trade to approach a question without bias, and it was owing to this and other causes that the Industrial Council so ably supported by Sir Charles Macara, had not fulfilled the hopes which many people anticipated when it was inaugurated.

He believed much might be effected by Boards of Conciliation, and did not consider that any difficulty had arisen or was likely to arise which was incapable of settlement if both sides approached the matter in a fair and reasonable spirit. By constantly meeting together in this way would be gained confidence which would tend towards industrial harmony.

He would like to see the decisions arrived at between Federations of Employers and Workmen enforced upon unfederated firms and workmen, and thought that agreements mutually entered into should, during their currency, be made legally binding upon the contracting parties.

There was no cause for undue pessimism, for he believed that with a broader outlook which was being gradually developed in the minds of all concerned, many of the recent upheavals would not be repeated.

PROFESSOR W. R. SCOTT

The President of the Section (Professor Scott), summing up the discussion, said that the different speakers were to be congratulated upon the manner in which they had stated their views, and what was very satisfactory and to a large extent justified the holding of that long conference, was the approximation to a common point of view. In summing up and commenting on the discussion, he proposed first to consider why at the present time there were signs of an acute position in the labour world. Why had this question of economic friction become pressing? War involved a great deal of dislocation. Many people who had got into the habit of working in a recognised way were subject to a certain amount of upheaval, and were thrown out of their normal method of working. That struck one at first with regard to production. Thus, the dislocation of industry reacted upon employers and employed. Both employer and worker were anxious to see that they were not damnified, and so the changes introduced by war tended directly to increase industrial friction. Moreover, the dislocation of war produced certain temporary monopolies, which raised the question of war profits and the taxation of war profits. There was also a monopoly of skill, because when the number of skilled workers in a particular industry became greatly reduced, there was created an element of monopoly. In the third place, there was a scarcity of some goods, which tended towards a rise of prices, and that, of course, increased the cost of living. The rise in prices, unless counteracted by an increase in nominal wages, diminished the value of real wages, and that was another element causing friction. As a partial corrective of that friction arose the question of war bonuses. Here, he thought, we had the main causes of the industrial friction of the present time. We might bear these inconveniences better if we were sure that they were temporary, lasting only for the war period. But the war had lasted sufficiently long to place many of our industries upon a war basis, and when we went back to a peace basis, a converse change would have to be made, and the probability was that the friction would be intensified.

But when we put on one side the special and temporary causes which were making for economic friction, there remained other and purely general questions. Before the war began there were causes that, on the one hand, were making the labour question increasingly difficult : there were others, upon the other hand, tending to bring about an easier and speedier settlement of labour disputes. Upon these general questions it was necessary to take a wide and comprehensive view. What had interested him personally, and what he thought was very fruitful in the course of the debate, was that there had been speakers who described themselves, on the one side, as employers, and, on the other side, as representatives of organised labour, and a tendency appeared on both sides towards a large measure of recognition of identity of interests. That was exceedingly hopeful and satisfactory, so far as it went. But there was to be found among the rank and file of the employers and among the rank and file of employed quite a different point of view. There was the employer who thought that cheap labour was the best labour for him. On the other side, there was the workman who believed that as a good trade unionist he should endeavour to get as much out of the employer as he could, and give as little as possible in return. The difficulty was that in both cases the question of efficiency earnings, which he suggested were the ultimate and real earnings of labour, had been thrown over altogether. How was the gap between the two sides to be bridged ? Unfortunately one could not produce any single formula. The best one could do was to suggest lines of action which might conduce towards a broader outlook by both sides. It might do no harm, to begin with, if both interests had a little more acquaintance with economic principles. And as a deduction from this, a widespread realisation of the necessity of lessening industrial friction was required. Just as in mechanics, valuable services had been rendered to engineering in reducing friction, so, in industrial organisation, one form of progress would consist in the lessening of that great source of social waste through economic friction, to an excessive extent in the adjustment of wages when it involve an interruption of the process of production. Secondly, one could not help being impressed by the avoidance of disputes in the great cotton trade, and the reasons assigned for it. It would be an immense advantage if other trades would take as a model the methods of the cotton trade in the

adjustment of wages, and so promote the same mutual knowledge of the conditions of the trade. Such knowledge would enable each side to realise more fully the difficulties of the other. His third point was that it would be well if both employers and employed took more pride in the work done. The spirit of co-operation in that sense—the mutual facing of difficulties and the overcoming of those difficulties, and the recognition that everyone who contributed to the work had a share in the result achieved—would conduce to the avoidance of friction. There was a fourth and minor point. That was the extension of co-operative principles and profit-sharing. These had a value up to a certain point. But if we depended upon them alone, the difficulty was that a very long time must elapse before a sufficient amount of industry had been transformed to either of these methods of organisation. In the fifth place, and finally, he believed we were only just beginning to see the benefit of conciliation, and this was a point upon which there was a considerable amount of agreement between employers and employed. A really more serious danger than the conflict between labour and capital, was conflict between different kinds of labour—taking labour to embrace every kind of worker who produced anything or rendered any economic service. Difficulties of this kind might introduce very serious defects into our social structure. He urged both upon employers and upon employed that there could be no such thing as any one interest holding up the nation. The nation as a whole had always sufficient resources to deal with any attempt of that kind. It was almost impossible for any strike or lock-out to succeed when public opinion was definitely against it. But public opinion had seldom had the chance of making its influence fully felt. Public opinion must have knowledge to exert itself with effect. It was by the formation of a well-informed public opinion that a very powerful moderating influence could gradually be brought to bear. By adequate knowledge and full discussion of the points at issue, the great body of the British public, which had a considerable amount of common sense, might become the ultimate court of appeal in a dispute. If it decided definitely in favour of one side, it would not avail for the other to continue a strike or lock-out.

CHAPTER III

OUTLETS FOR LABOUR AFTER THE WAR

Conference Committee

THE Membership of the Conference on Outlets for Labour after the War was as follows: Archdeacon Cunningham, D.D., F.B.A.; Messrs. C. W. Bowerman, M.P., W. J. Davis, J.P., J. St. G. Heath, J. A. Seddon, E. D. Simon; Sir H. Rider Haggard, Sir C. P. Lucas, K.C.B., Sir C. W. Macara, Bart., Sir Sydney Olivier, K.C.M.G., Sir E. im Thurn, K.C.M.G.; Professor E. C. K. Gonner, and Mr. Egbert Jackson. Chairman: Professor W. R. Scott, F.B.A. Secretary: Professor A. W. Kirkaldy.

I.—INTRODUCTION

TERMS OF REFERENCE.—The terms of reference were to investigate into—

1. The replacement of men by women in industries during the war.
2. The permanent effects of this after the war.
3. The character of re-employment with respect to changes of tastes and physique amongst those who have served with the Forces and are disbanded.
4. The means by which consequent unemployment may be counteracted or minimised.
5. The possibility of employing disbanded men on the land.

It was decided that the best method of dealing with the first two terms of this reference would be to investigate those industries in which the extra employment of women since the war has been most marked, as well as those industries in which there were possibilities of an extension of women's work, with special reference to those trades localised in the London, Manchester, Leeds, and Birmingham districts. The inquiry was commenced in the beginning of June, 1915.

For the work, other than in the Birmingham district, through Mr. J. St. G. Heath, who acted as Hon. Secretary, the co-operation of a Sub-Committee under the chairmanship of Professor L. T. Hobhouse, working at the London School of Economics and Toynbee Hall, was secured. This Sub-Committee appointed Mr. E. F. Hitchcock as secretary, and they wish here to express the debt which they owe to him for his labours; not only was he responsible

for the work of organising this part of the inquiry, but in addition he prepared the first draft of their Report. The investigators and members of the Sub-Committee were—

Sub-Committee.

Professor L. T. Hobhouse

*Miss E. B. Ashford

*Miss D. Austin

*Miss M. E. Bulkley

*Miss M. Cross

*Mrs. B. Drake

*Miss E. Dunlop

*Miss A. C. Franklin

*Mr. F. H. Hamnett

Mr. J. St. G. Heath

*Mr. E. F. Hitchcock

*Mrs. F. W. Hubback

Miss B. L. Hutchins

*Miss B. Keen

*Professor A. W. Kirkaldy

Mr. J. J. Mallon

*Miss Moses

Mrs. Pember Reeves

*Mr. A. Robinson

*Miss M. Stettauer

Miss L. Wyatt Papworth

*Miss N. Young

Miss D. Zimmermann

* Investigators.

Professor Kirkaldy undertook to organise the investigation in the Birmingham district, especially with reference to munitions and the metal trades. The Central Care Committee of the Birmingham Education Committee, whose Chairman, Councillor Lord, was keenly interested, made it possible for Miss Anne Ashley to undertake the direction of the investigation. Miss Lee of the Birmingham Women's Settlement was appointed investigator.

With remarkably few exceptions, and in spite of the pressure of war work in some of the industries investigated, employers, managers of companies, Trade Union officials and individual working men and women showed great willingness to help on the work of the Conference. Very valuable assistance was also obtained from various women's organisations throughout the country. Thus a considerable amount of useful information was collected, and although owing to the still undeveloped state of a unique economic situation, statistical data were not fully available, it has been found possible to compile a Report which, on its descriptive side, refers to new and interesting phenomena which have entered into English industrial and commercial life.

It was decided that the last three terms of the reference could at the moment be more suitably dealt with by papers and discussion. To this end Mr. Christopher Turnor was asked to read a paper on Land Settlement for ex-service men, and Major Tudor-Craig undertook to give the Section the benefit of his experience on the employment of disbanded soldiers and sailors.¹

¹ Mr. Turnor is publishing a book which will contain the substance of his address at Manchester. Major Tudor Craig was, unfortunately owing to illness, unable to attend the meeting as had been arranged.

This Report is, therefore, confined to the replacement of men by women in industries as a result of the war, and the possible permanent effects of this replacement. After the discussion at Manchester it was finally revised by the Officers of the Section, who are greatly indebted to the above Sub-Committee, and more especially to Miss Ashley and Mr. Hitchcock. The other members of the Conference are not responsible for the details given nor for the views expressed.

II.—WOMEN'S EMPLOYMENT DURING THE YEAR AUGUST, 1914, TO AUGUST, 1915

After a year of war we are able to regard with some knowledge the course which women's employment has taken during that period, and the nature if not the extent of the entry of women into trades and occupations hitherto reserved wholly or partially to men. Broadly speaking, that movement has only just (August, 1915) begun to assume any appreciable magnitude. In few industries has the position yet shaped itself. We are, therefore, at present able to do little else than to indicate the course which industry has taken and roughly to sketch the events which have led during the past year to the present position.

Employment in Early Months of War.—It was clear to the least observant that during the first two or three months of the war a considerable depression had been caused throughout industry, especially among the following trades: dressmaking, millinery, women's fancy and children's boot and shoe making, silk and linen, cigar and cigarette making, the umbrella trade, confectionery and preserve making, cycle and carriage making, jewellery, furniture making and French polishing, the china and glass trades, stationery, and printing. In some trades a shortage of raw material or the loss of enemy markets caused a more or less lengthy period of depression. Thus the shortage of sugar caused very considerable unemployment in what was almost entirely a woman's trade—jam-preserving and confectionery. The chemical trade was also affected by the complete cessation of the import of certain commodities from Germany. The practical closing of the North Sea to fishers brought to a standstill the occupation of those women who are to be found every

season in thousands on the English coasts following the herring round.¹ The closing of the Baltic cut off the supplies of flax from Russia upon which our linen trade largely depends, and women's employment in a whole trade was again considerably decreased owing to the lack of raw material. In almost every trade unemployment figures rose to a point only equalled in times of very severe trade depression. The cotton trade was especially hit. Before the war a period of decline had set in, and Lancashire suffered in addition from all the disadvantages incidental to a time of naval warfare. Casual houseworkers such as charwomen and office cleaners, and even skilled domestic servants such as cooks, found themselves out of employment owing to the economies which the public were making. The unemployment of good cooks, however, did not last many weeks.

Distress amongst Women.—The distress caused by unemployment is generally felt more by men than by women, but in the early days of the war the effect of trade dislocation upon women was out of all proportion to its effects upon men. For the women there were few counterbalancing forces such as recruiting; indeed the full economic effect of the immediate trade depression fell upon them, and the irregular payment of separation allowances at the beginning of the war considerably added to the prevailing distress.

Revival of Trade.—Happily this state of affairs did not last long. Very soon the Government came into the market as chief buyer, and found industry very willing to concentrate both its labour and machinery upon the production of goods to clothe, feed, and equip armies. The collapse of those trades connected with the normal demands of peace had released thousands of women for other industries, while the contraction of men's employment had been almost wholly counterbalanced by recruiting. In September just under a quarter of a million women, apart from those in non-industrial occupations such as clerical work and retail distribution, were unemployed as compared with the numbers in industry at the outbreak of war. The men were fighting and the women had to take their places. From September onwards women—unskilled and industrially ill-equipped as the great majority of them were—poured into the leather, tailoring, metal trades, chemicals and explosives, food trades, hosiery, and the wool and worsted industry,

¹ See *Englishwoman*, December, 1914, article by J. Haslam.

which had been suddenly revived by the placing of large orders by the Allied Governments. Between September and December over 130,000 women were drawn into the ranks of industry proper, but still 80,000 unemployed women remained in spite of the net shortage of men, which amounted to about a quarter of a million. Fortunately *the new demand was to a large extent for that class of goods in the production of which female labour normally predominates.*¹ An extension of women's normal employment rather than a displacement of men's by women's labour was what occurred.

Lack of Skilled Labour.—Unfortunately recruiting was carried out without discrimination, and by December the outstanding feature of the labour market was the enormous shortage of skilled men in all industries, a shortage which led to the contraction of women's employment. In some instances employers attempted to train women, but in most cases time was too short, the experiment too risky, and the pressure of business too great, for employers to become enthusiastic over such schemes. Where it was possible to transfer women from one branch of a trade that was slack to an allied branch in which the work was brisk this was done, but there were limitations to such transference. Women were untrained industrially, and, as week by week went by, the lack of skilled men became more and more marked. Through the National Labour Exchanges a Register of Women was compiled and about 86,000 names were enrolled, but only a small minority—4,750—were able to undertake the skilled jobs awaiting them. It must be remembered, however, that a large number of these women were skilled in occupations and professions other than industrial.

By February some of the Government contracts, *e.g.*, clothing, had been reduced, but overdue private home and shipping orders were sufficient to keep the industries affected in a prosperous and busy condition.

Munitions.—The group of trades which showed the most phenomenal increase in spite of the huge Government contracts which had been already placed, was the munitions group. The story of Neuve Chapelle, the creation of a Minister of Munitions, and the increasing needs of ourselves and our Allies for munitions of war caused an unprecedented demand in this group. Into the armament branches, therefore, of the metal and engineering trades many

¹ See separate Reports on Tailoring, Leather, and Food Trades.

thousands of women have been pouring since February. It is as yet early to draw deductions from this further entry of women into munition work,¹ though it is as well to bear in mind that much of the work, *e.g.*, shell making, is exceptional work and will diminish when peace is declared.

Present Effects of War on Industry.—The women who have entered industry since the war seem for the most part comparatively young. Billeting money and fairly liberal separation allowances have been sufficient to prevent any large number of unskilled married women from returning to work in factories.

One of the tendencies of the war is clearly to transfer a more than normal proportion of the nation's business to large concerns. Though this has its drawbacks the balance on account is probably to the advantage of the women who have entered, as far as the safeguarding of their standard of life is concerned, and consequently of that of the men who will return.

It is clear that the year has seen an enormous upheaval in industry ; factories have been adapted to meet new demands and to facilitate women's employment ; Trade Union and Home Office restrictions have been relaxed ; women are replacing men ; experiments are being made and knowledge gained which may well revolutionise many branches of industry. The dominating demand upon industry is that made by the volume of Government contracts. At the end of the war these will substantially decline and industry will begin to resume its normal course. But every transference of labour, every youth put into a man's place, every woman who has received training because of the war, adds something to the bewildering chaos of those industrial problems which will have to be grappled with when peace is declared.

III.—THE GENERAL POSITION

In the earlier months of the war, industry, following the lead of public opinion, organised itself on the assumption of a war of short duration, and a considerable period elapsed before it was generally realised that experiments in the employment of women might have to be made on a considerable and unprecedented scale. The necessity of immediate action in utilising the potential resources of

¹ See Report on Metal Trades (p. 133 and on).

female labour was not understood, and it is now possible only partially to remedy this past error of judgment. Necessity, however, is proving the spur to effort, and experiments and trials are now being made in this direction. Of the results of these interesting developments it is, however, as yet too early to judge. We can only indicate what appear to be the main features arising out of the new conditions of women's employment during the past year.

After twelve months of war three features of the labour market stand out in special prominence—

- (1) *The serious shortage of skilled workpeople ;*
- (2) *The considerable extension of women's employment ;*
- (3) *The limited extent to which women have replaced men, in the sense that women are now doing work previously done by men.*

(1) *Serious Shortage of Skilled Labour.*—With few exceptions the reports during the last eight months from industries engaged on war contracts eloquently repeat the serious nature of the situation caused by the shortage of skilled workers, due to the number of skilled men who have enlisted, and to the changes in industrial methods which demand a small number of highly skilled mechanics working in conjunction with a comparatively large number of less skilled operatives. Men who in the earlier months of the war joined the Forces have in many cases actually been withdrawn from the fighting front to assist in filling the gaps caused by this deficiency in the ranks of industry. There is no lack of unskilled workers, but the extent to which semi- or unskilled labour can be employed depends not only upon the amount of that labour available, but upon the extent to which skilled labour can be obtained. In the case of the men who remain the lack of training and experience is all too general ; amongst women it is, with rare exceptions, the universal rule. Apart from other disabilities this factor alone has been sufficient seriously to limit the entry of women into those industries in which there are enormous demands for materials of war. Not only have the majority of women, owing to their lack of training, found it impossible to take up skilled work in these trades, but, as stated generally above, the absence of skilled workers amongst them has in its turn proved an almost insuperable obstacle to the employment of any but a small proportion of the great waiting army of willing but unskilled female labour. *This shortage of skilled labour is the cardinal feature of the industrial position with*

which the nation is now faced. It is true that by minor adjustments in the organisation of the trades concerned the entry of a few extra women can be facilitated, but the situation in its broad aspects seems almost insoluble during the present time of war. Certainly in a great many industries women are working on processes previously wholly or partially done by men, but the extent to which this is the case is inconsiderable. The margin of difference, however, between actual fact and possibility is yet to be discovered.

(2) *Extension of Women's Employment.*—It is impossible with any accuracy to give figures indicating the extension of women's work since the war. The trades in industry proper in which the extension of women's employment has been most marked are engineering, chemical trades (explosives), leather work, tailoring, meat preserving and grain milling, shell basket making, elastic webbing, scientific instrument making, brush making, electrical engineering, canvas sack and net making, leather tanning, rubber work, hosiery, hardware, wire-drawing, tobacco, boot and shoe trade, shirt making, wool and worsted, silk and jute trade. Excluding the munitions branch of engineering, the extra employment of women in these trades probably does not exceed 100,000, and four months ago was little more than half that number, compared with the same month in the previous year. A small proportion of the extra women employed in these trades is, however, doing men's work, the probable reasons for which are discussed later. Generally speaking, the extra employment of women in any branch of industry proper has been effected by transference from trades that are depressed or from branches of the same trade which are slack to those that are brisk.

A marked acceleration in women's employment has also taken place in *non-industrial occupations* such as shop assistants, bank clerks, and in other forms of clerical work, waitresses in hotels and elsewhere, and certain classes of railway work. In these occupations women have probably replaced men, in the sense of doing men's work, to a greater extent than in industry proper. The supposed social status of an occupation rather than its pecuniary gain appeals more generally to some women than to most men, and many women who find their home surroundings somewhat dull, and a shop counter or an office stool comparatively attractive, would never consider entering a factory or a workshop. Consequently we find that for

the most part women who have entered industry proper since the war have had previous industrial experience in other trades, and that where they have not been wage-earners previously they have been attracted in a great many cases to the more "lady-like" occupations. Patriotic motives have, however, supplied a stimulus to a number of women to enter industry. Those branches concerned with the production of munitions and direct war supplies have proved especially attractive in this respect.

The relaxation of Trade Union and Home Office restrictions has also had the effect of extending women's employment. Where a shortage of male labour has been apparent the Trade Unions have in many cases, *e.g.*, in the leather, engineering, and metal trades, wool and worsted trades, etc., agreed with employers that, for the period of the war only, women may work on processes which were previously done wholly or partially by men, on the condition that the wage rates paid to the women shall be the same as those paid to the men. The relaxation¹ of Home Office regulations has only been made on application in particular cases, and is mostly connected with the extension of overtime. Many of the trades in which the war demands have been extensive, normally employ a larger number of women than men, and in these the extension of women's employment has been considerably accelerated by the war.

(3) *Replacement.*—*From the fact that fewer men and many more women are now in industry there is a prima facie case for supposing that women have replaced men in the sense that they are now doing processes which before the war were done by men. Our information, however, shows that it is not the case, save in special instances and to a limited degree.*

The one important factor upon which the prosperity of industry depends to-day is the virtual monopolising of the market by our own and the Allied Governments. It will be interesting to consider whether the war demand is not on the whole a demand for a class of goods in the production of which a greater proportion of women rather than men can be more usefully and economically employed than under normal peace conditions. The nature of the demands arising out of the war must have an important bearing upon the kind of labour required. A large part of the Government demand for goods is in those branches of trades in which a larger proportion

¹ Cf. *Board of Trade Journal*, 8th July, 1915.

of women is employed than in the trade as a whole. A good example of this is the tailoring trade, which normally employs something like 130,000 women, together with a large casual fringe of women who come into the trade in times of seasonal pressure. This trade illustrates the point at issue, though it will not, of course, be taken as typical of all industry. The retail bespoke branch, in which high-class tailoring work is done, employs men almost entirely, and owing to the war it has been very depressed, for the demand for "high-class" work has been much reduced. The clothing of a soldier is good but not "high class" in the sense in which a Bond Street retail bespoke tailor might use that term; it is tailoring done in the medium branches of the trade in which female labour normally predominates. This part of the trade has drawn women and girls from its other branches and from its fringe of casual labour as well as from other trades in which there was a surplus of female labour. It thus shows a great increase of female labour owing to the war, which has been drawn in, not to undertake work previously done by men, but merely to cope with a huge increase of orders in that branch of the trade in which a larger proportion of women than men is normally employed. Again, the cloth from which the uniform is made is not the very finest suiting, and the huge demands upon the wool and worsted trade for it have resulted, as in the tailoring trade, in a larger demand for female labour compared with the demand for male labour than the trade as a whole would normally employ. The great increase of women's employment in the leather trade owing to the war has, to a certain extent, been in the lighter accoutrement branches on processes normally done by women; while in the boot and shoe branch there has actually been a replacement of women by men owing to the heavier nature of the work required in the military than in the civilian boot.

A considerable part of the Government demand is also in trades, e.g., the munition branches of the engineering and metal trades, in which a large proportion of semi-skilled or unskilled female labour can be absorbed especially in such exceptional processes as the filling of shells, and in which after the war the demand will decline.

From the above considerations it will be seen that *much of the extension of women's employment during the war in industry proper is in work which is normally done by women and in which the necessities*

of war have created an unprecedented demand. Other work now done by women is exceptional work which will decline with the advent of peace. But a survey of the whole field suggests that owing to the installation of special plant the proportion of woman labour may be affected.

But though women are not as yet to any considerable extent doing the work of men or undertaking highly skilled jobs, they are undoubtedly slowly undertaking processes in many trades which were previously thought *just* above the line of their strength and skill. This is seen particularly in leather, engineering, and the wool and worsted trade, and also in trades which, though depressed since the war, have yet experienced a shortage of certain forms of labour, *e.g.*, pottery, cotton, and the printing trade. This shifting of the line of demarcation between men's and women's jobs has in many cases received Trade Union opposition, though in most cases agreements have been made for the duration of the war only and without prejudice to the consideration of the question after the war. In this connection it would be interesting to consider in how far Trade Union restrictions, especially those concerning the entry to the trade and the period of training required, are based upon the conditions which prevailed in the past or upon the realities of the present. Employers are, however, reluctant to express opinions until more experience under the new conditions has been gained.

In non-industrial occupations, such as clerical work, in certain forms of railway and vehicle work, such as ticket collecting, carriage cleaning, and tram and 'bus conducting, in various forms of retail distributive work inside retail shops as well as outside work like van driving and delivery, and in warehouse work such as packing and dispatching, women have, however, replaced men, in the sense of doing work previously done by men, to a much larger extent than has occurred in industry proper. The majority of firms, when faced with a shortage of male labour, have first commenced to replace men by women in their office and warehouse staffs. Clerical work is obviously suitable for women, and employers have had far less hesitation in introducing a greater proportion of female labour into this side of their business than into the industrial side proper. The conditions of the clerical labour market, including as it does a great majority of clerical workers who belong to no trade

organisation, have made it easier to introduce female labour without encountering serious opposition from the Trade Unions concerned, than in those trades where the group of workers is smaller and the workers are more highly organised. Enlistment has also been exceptionally heavy, in some cases over 30 per cent., among men such as clerks, whose occupation is sedentary, and, in spite of the restriction of business, the net shortage of men was soon apparent, and women, mostly young girls from school or middle-aged women from professions which have been hit by the war, were rapidly drawn in to make up the shortage. In Government departments, local authorities, banks, insurance and other offices, as well as ordinary business houses, women are being utilised in increasing numbers to do work previously done by men.

Into most of these occupations women have entered to do work either slightly more difficult than that done by women before, or else work entirely new to them, such as railway work, and clerical work in banks. In few cases, however, is the work now done by women exactly similar to that previously done by men. Obviously, the lack of training and experience, together with natural disabilities of physique, make certain forms of work and conditions of labour impossible for women which are possible for men. Thus, in the case of ticket collecting, in which at first sight men's and women's employment appears equal, it is found on inquiry that the women work shorter hours, requiring three shifts to do what men do in two, and their shifts are arranged when traffic is less heavy, thus leaving the more arduous work to the men. In many of the large stores three women are required to do the work formerly done by two men. It is as yet too early to form final judgments until women have had time to adapt themselves. Until 16th August, 1915, the extra women employed on railway work owing to the war had been paid less and given lighter and shorter work than the men. Since that date, however, the railway companies have agreed that women shall be paid the same rates as the men, and, in consequence, given similar work. It will be interesting to discover how far women will successfully compete with men in this work now that the conditions are approximately equal.

Both in industry proper and in non-industrial occupations women have often been introduced to do the work, not of the men who have enlisted, but of boys and youths who have been promoted

to do the work formerly done by men. This work was either of an arduous nature or required special knowledge which in part the youths had already picked up. Young girls have replaced boys as messengers, etc., and young women have taken the places of youths. It was often remarked by employers that girls are found generally more efficient, careful, and conscientious than boys, and apart from work entailing physical strain, such as the carrying of heavy parcels, are much to be preferred to them; on the other hand, the majority of employers considered that adult women are less efficient than men.

Readjustments in Industry.—Considerable attention has been devoted by some employers to the further subdivision of processes and to the grading of labour, as well as the introduction of mechanical and other readjustments, in order to facilitate the employment of women.¹ Men's work has generally been that requiring more *strength* and more *skill* than women's work. Thus a greater differentiation of process as between skilled and less skilled, lighter and heavier work, has made possible the further employment of women in processes in which their economic value is equal to that of an average man. In some cases, this specialisation of function is opposed by organised labour, as in the case of the cotton trade and railways,² on the ground, among other reasons, that the readjustments result in the wage rates of men remaining the same, while the arduous nature of the work they have to do is increased.

In this connection one point has come out somewhat forcibly. Throughout most trades the extent to which up-to-date machinery and efficient organisation have been introduced differs to an extraordinary degree as between different firms. One firm will have introduced methods and machinery which in another firm have not even been considered. To this lack of knowledge and initiative is due several of the difficulties experienced by some employers in extending women's employment with the object of releasing men.

In normal times practical opinion suggests that extreme specialisation may be a questionable advantage, as possibly sacrificing quality to output. Skilled labour is so scarce owing to the war that employers have necessarily to economise it. The present

¹ See *Distributive Trades* (p. 100).

² See p. 114.

demand is abnormal, but it shows the necessity for giving serious attention to the training of skilled mechanics.

The Training of Skilled Labour.—A time of war is the time especially when the preparedness and fitness of a nation is tested, and this applies to industry as much as to other more militant activities of national life. The dangers of an insufficient supply of skilled labour revealed by the present crisis have opened our eyes, as probably nothing else could have done, to the importance of industrial training in both its immediate and its permanent aspects. Experiments in the training of women for industry and business are now being increasingly made to meet present demands.¹ In spite of the special circumstances these developments have as much a permanent as a temporary significance, and some examination of the more permanent aspects of the problem may therefore be of value.

It is obvious that the training of women as skilled workers depends upon—

(1) Circumstances, common to both men and women, relating to the organisation of industrial training.

(2) Psychological, physical, and other conditions in which men and women differ. These are discussed in Section IV.

(1) The fact that many industries of a nature which can be learned in a few weeks' time at present offer employment to large numbers of unskilled workers, has not been altogether favourable to the training of the skilled worker. If a boy or girl can become a productive worker almost at once, it requires special knowledge and self-control on his or her part to remain in the position of a learner with a learner's wage for years, in order to become a skilled artisan. Nor are the steps by which young workers may climb to this position made clear to them or to their parents. It is of great

¹ The Interim Report of the Central Committee on Women's Employment (Cd. 7848) contains some interesting suggestions on the promotion of new openings for the permanent employment of women. Little of a practical nature has, however, yet been done, although the suggestions made extend to the following trades: Toy-making, artificial flower making, and the making of baskets, bonbon bags, hair nets, memorial wreaths, nets, polished wood fancy articles, potash (from seaweed), rugs (of a kind previously made in Austria), slippers, stockinette knickerbockers, surgical bandages, tapestry, and tinsel scourers, and also gold beating, the weaving of willow and rush for mats, chairs, and baskets, and the cottage weaving industry. In these occupations little opportunity occurs for displacing men by women; they are mostly small industries in some of which it was suggested that advantage might be taken of the cessation of enemy competition.

importance that they should be shown clearly that training is for their own advantage, and that it is on training that the ultimate scale of their pay and the security of their work depends. This may be effected to a great extent by the juvenile branches of the Labour Exchanges co-operating with the Care Committees of Education Authorities.

Employers could assist by making clear to every beginner the possibilities for advancement, and by doing so would probably build up a more stable working force.

The decay of the apprenticeship system which has proceeded with especial thoroughness during the last thirty years, and the recent changes in methods of production and especially the increasing introduction of machinery have, it may be feared, given rise to the impression among many parents that it is useless for their children to be trained as skilled workers. Skill is needed now, as it has ever been, but the type of skill required changes so rapidly as to make industrial foresight very difficult, especially to the young workers and in a lesser degree to the firms which employ them. Even where there is formal apprenticeship, or the definite status of learner, a good deal of time is apparently wasted during the first few years of training, not only in promiscuous fetching and carrying, but in processes which become obsolete during or soon after the period of training. According to the opinion of some credible witnesses, systematisation alone would shorten by some 30 per cent. the long term of apprenticeship demanded in certain trades.

The relative functions of the technical school and the workshop in the training of the artisan must vary according to the trade, but there are three main directions in which development is desirable—

(a) The further establishment of full-time Technical and Trade Schools, working *in close co-operation with the trades concerned*, and making a special study of the most recent developments in technique and the future prospects of the several trade processes.

(b) The development of part-time Continuation Schools, and of the practice of permitting young employees to attend during working hours, in view of the generally admitted failure of evening instruction at the end of a day's work.

(c) A workshop training systematised and reduced to the shortest period compatible with efficiency. In some trades this might take the form of a modified apprenticeship adapted to the needs

of the time. This should be subject to frequent modification with the alteration of processes, so as to ensure that the apprentice is not required to make sacrifices more than commensurate with his or her gains. In some trades, however, a systematic promotion from one department to another would probably be possible without formal apprenticeship.

(2) In the metal-working trades, especially, and this is also true of some others, all the highly skilled workers are men. The women employed in these trades are either semi-skilled or unskilled. The question arises whether women are capable of becoming highly skilled workers, and if so, whether they would in normal times be preferred to men. This depends on a variety of circumstances, physical, psychological, economic, and social. Some employers in the more skilled trades, *e.g.*, engineering, express a doubt as to whether women could be trained to the same degree of skill as has been attained by highly skilled men, maintaining that women lack as a rule the necessary qualities of judgment and initiative, and dislike shouldering responsibility. This point of view was often expressed in less skilled trades. Other employers expressed different views on these points, being convinced that in time women would be able to attain the skill and initiative of the best men workers, provided the work which they were expected to do did not entail too great a physical strain or was not in other ways harmful or objectionable to them. The majority of employers, however, seem to be agreed that women generally prefer mechanical and routine employment.

In spite, however, of the view which we have found to be prevalent among the majority of employers, experience is teaching that given the opportunity, women can produce work which, in spite of their lack of industrial experience, compares favourably with similar work done by men. In some engineering shops where every facility has been given to women to undertake new work involving some judgment and skill, their work has reached a high pitch of excellence, and has been little inferior in output to that of men. Hitherto in engineering, women have been employed almost entirely on "repetition" work. During the past few months, however, considerable and far-reaching changes have been effected which are likely to have a very marked effect after the war. In a factory which is engaged in the production of projectiles up to 4.5 in. a new department

was started a short time ago, the workpeople being women, under the direction and supervision of a few expert men. Though the majority of the women were raw hands totally unaccustomed to tools it was found that within a few days their work attained the necessary accuracy. Much of the work demanded intelligence of a high degree. The women have shown initiative as well as manipulative dexterity—*e.g.*, in a certain screwing operation it was customary, before the employment of women, to rough the thread out with the tool and then to finish it off with taps. Some trouble having arisen owing to the wearing of the taps, the women of their own initiative did away with the second operation, and are now accurately chasing the threads to gauge with the tool alone.¹ This is work of which any mechanic might feel proud. Within the past few months women have also undertaken heavier work than was previously thought possible. They are turning out 18-lb. high-explosive shells and Russian 3-in. shrapnel, work involving twenty-one operations, all of which are now done by women. On the delicate work necessary for time fuses they are found particularly suitable. Women need encouragement and sympathy in their new surroundings, and the ordinary male workshop attitude is not one in which their best powers and abilities are encouraged. The standards of the past are too apt still to bar the way to the encouragement of women's employment in other than mere mechanical work. Skilled workmen are sometimes selfish and employers prejudiced, and this attitude may postpone the replacement of men by women in some cases. Examples such as those given above are not frequent, but they indicate something of the possibilities of the replacement of men by women, especially in munitions, where women are increasingly needed.

IV.—POSSIBLE LIMITATIONS TO THE INDUSTRIAL EMPLOYABILITY OF WOMEN

From what has been said before it will be obvious that, the customary barriers to the employment of women having broken down, the chief factors remaining are the fitness and willingness of women to undertake industrial work. In the past the obstacles to women's employment have been—

¹ Quoted from *The Engineer*, 20th August, 1915.

1. Women's lack of physical strength and staying power as compared with men's. Lack of physical strength effectually bars them from undertaking work entailing any considerable physical strain. In some cases the work has proved injurious to them, *e.g.*, the carrying of heavy weights in warehouses. In the printing trade it has been suggested that women should do "laying on." As this often involves the handling of heavy rolls of paper the process is really prohibitive to women unless it can be subdivided and the heavier work given to the men.

It is stated that women are less reliable than men owing to more frequent absences on account of illness. Figures supplied by certain insurance companies show that between the ages of 21 and 40 women's absences are 15 per cent. as against men's $5\frac{3}{4}$ per cent., though below 21 years of age there is hardly any difference. In this connection it should, however, be remembered that the lower wages of women and the double strain imposed by their home duties often react upon their health and increase the natural sex disparity.

2. Certain forms of work are believed to be bad for a woman's character or debasing to her taste, making her less fit to care for and train the next generation. Here the problem is more difficult, and where these difficulties are real improvements could probably be made in conditions and hours of work. It may be suspected that in many cases conditions which are morally or intellectually bad for women are not altogether beneficial for men!

3. The comparative shortness of women's industrial career has led employers to regard time given to the acquisition of technical knowledge by women as wasted. The young girls employed make up so large a proportion of the total amount of female labour that it is customary to treat them as if industrially they never grow up. In most trades there is a certain amount of work requiring more experience, which absorbs the comparatively small proportion of women who do not marry, or who remain permanently in industry after marriage.

Since, unfortunately, for some time to come it seems probable that the female population will be more in excess of the male even than in the past, the number of women who remain on the labour market all their lives is likely to be increased. Already it is stated in some works that during the last year promotion has been very

slow because of the comparatively small number of marriages. Industrial ambition among girls is, therefore, becoming very desirable, and experiments in their industrial education are likely to become increasingly necessary.

4. Women in the main do not regard their occupation as their life's work. The industrial value of a woman is minimised by the probability of her marrying, and in the majority of cases her consequent withdrawal from the trade. In any case, it is stated that her attitude to marriage causes her attitude to her work to be less stable than that of men. In many trades it is said that women require more supervision than men, owing to what appears to be their lack of initiative and timidity with regard to responsible work. They are less ambitious and more content to remain in positions which make comparatively little demand upon them.

In less skilled work, however, women are often in many respects superior to men. A woman is generally a more cheerful worker, and does not feel to the same extent as a man the monotony of performing some small operation during long hours at a stretch and week after week. Women are also traditionally more sober and patient than men. Both employers and workpeople speak with admiration of the patience of women. This patience is no doubt partly due to the fact that most women do not expect to be employed industrially over a period of many years.

It is difficult to dogmatise upon the attitude of woman to industry, and still more to prophesy as to her attitude in the future, but, speaking generally, it is not incorrect to say that heavy work and work requiring great physical strain are debarred to woman because of her lesser physical strength and stamina. Secondly, her attitude towards marriage is essentially one of the realities to be faced. Whether woman comes into industry on greater terms of equality with man, as far as training and continuity of employment are concerned, depends largely upon her own inclination in the matter, though changed economic and social circumstances may force a still larger proportion of women into the labour market. How far she will be able to compete then with men will be determined by her attitude and the natural disabilities which press all too unfairly upon her in competing with men in industrial life.

The above conclusions, which are based upon the opinion of employers and others whose past experience enables them to judge

of the suitability of women for industrial employment are not intended to be in the nature of any final statement of the limitations to women's employment. They attempt to indicate the difficulties which have beset women's employment in the past, and though many of them will obviously remain, some will no doubt be considerably modified, especially if the women concerned are sufficiently anxious to overcome them and to enter and remain in industry on more equal terms with men. Already, within certain spheres, some of the possibilities of women as organisers and skilled workers have been demonstrated by numbers of trained and educated women; with further education and training and a greater freedom to work out their own economic destiny it does not require a vivid imagination to picture a state of things differing in many essentials from some of the realities recorded above.

V.—WAGES

The question of wages is at once the most controversial as well as the most complicated question of women's employment. Roughly, women receive 50 per cent. to 75 per cent. of the wages paid to men in similar occupations. This at first sight would appear an injustice. But the conditions must be thoroughly understood before it is possible to dogmatise. A mere statement of the comparative wages of men and women without mention of the attendant circumstances is useless. As far as this Report is concerned it has been difficult in the time at our disposal to collect all the facts necessary for a thorough consideration of the question. We can, however, indicate some of the chief factors from the point of view of both employers and workpeople.

Reasons given for Low Wages of Women.—Employers are apt to regard the question of wages from one aspect only—that of paying to the individual worker what in the employer's opinion he or she is "worth." Men's Trade Unions and many of the women's organisations, on the other hand, object to the payment to women of lower rates than those paid to men for similar work. In some cases the policy of the men on this point is opposed to that of the women in the same industry—the men asking for equal rates for men and women, and the women objecting on the ground that this would lead to their effectual exclusion from the trade.

The limitations to women's employability stated in the preceding section must be borne in mind in a consideration of the question of wages, as they have a direct bearing upon the question of women's output as compared with men's.

Though women are often paid the same piece rates as men when the work is similar, they are very rarely paid the same time rates owing to their lesser output. In addressing a deputation of women on the subject on 13th April, 1915, Mr. Runciman stated that in this matter the Government intended to follow the practice usual in private industry—"in replacing men by women we have provided that under Government contracts the same piece rates are to be paid for women as for men, and in regard to time rates no special conditions have been laid down."

The reasons given by employers why the wages of women are lower than those of men may be divided into two groups. The first group depends upon those causes stated in Section IV and resolve themselves briefly into—

1. Women can perform only the lighter processes.
2. The output of women is less than that of men.
3. Women are less skilled and experienced than men and are rarely willing to devote much time to training even if employers thought (as they rarely do) that the short duration of their industrial life justified a long training.
4. Some conditions, such as night work, are more objectionable in the case of women than of men.

It should be remembered, however, that a man's wage in the earlier stages of his industrial career is reckoned in two dimensions—the size of the wage and the prospects of promotion and higher pay after a period of training or experience. A youth often starts at a nominal wage and gives a part of his services for a period of years on a tacit understanding that later he will be able to obtain a rapid and substantial increment of wages. In the case of a woman, however, assuming that her industrial career is shorter than the average man's and that in the majority of cases she has fewer prospects and is only employed for her intrinsic output, it would seem only equitable that, other things being equal, a woman's wage in the earlier stages, instead of being lower than that of a youth doing the same work, should be on a higher scale.

In comparing men's and women's wages it is further necessary to

discover how far the work done by each is substantially the same. Even during the present time of stress, when women are to a certain extent doing work which would normally be done by men, the work, as shown in the detailed portion of this Report dealing with separate trades, is very rarely similar as regards either process or conditions. With the introduction of women the work has often to be subdivided, and the men generally have at least the arduousness of their work increased with oft-times the addition of overtime and night work and a larger amount of work entailing a greater strain. Where workshops have been recently built for women workers they have been equipped with machinery of a very different type from what would have been installed had the management been able to procure skilled men. Whilst women can readily be trained to work such tools as capstan lathes without any great difficulty, a long training is necessary in operating other tools for producing the same fittings. In many of the textile trades it is found that where men and women work the same machine the work is unequal, as only in rare instances can the women "tune" or "set" their machines. The assistance of a male "tackler" is required, and time is lost as well as extra expense incurred. The apparent simplicity of the "equal pay for equal work" test is in practice found to be extremely complicated and difficult to apply.

Social Custom.—The second group of reasons advanced by employers for paying women at a lower scale of wages depends more upon custom and social outlook. Thus many employers excuse the lower wages of women on the ground that the needs of women are smaller than those of men. It is argued that a man's wages have normally to be used for the support of a household, while a large proportion of working women have only themselves to support. Some employers also state that as women ask for less wages than men, they are paid less in consequence. Others follow social custom in regarding women workers as of a lower status than men.

These reasons are apparently regarded as adequate and conclusive by many employers, but they are looked upon by representative working-class opinion with great suspicion. Our evidence goes to show that the difference between the wages of men and women is often more than can be justified by any difference in efficiency, and that this has the result of making it profitable for a firm to introduce the largest possible amount of female labour. For the

most part Trade Union (male) opinion agrees that on the basis of "to everyone according to his needs," the lower wages of women might be justified, although they believe that the low demands of women workers are partly the result of lack of organisation and of industrial ambition among them. Whether, however, payment of a lower wage to a woman be unjust to her or not, the Trade Unions maintain that it is unjust to the man whom she is thus able to underbid.

In this connection it is only fair, however, to state that the evidence of some employers goes to show that where they have replaced men by women their wages bills for the same output have been greater than when they employed men only. Often two women have had to be employed instead of one man, and three women instead of two men is a fairly common occurrence. This, of course, only illustrates the familiar contention for which in recent years the Trade Boards Act has supplied additional proof, that low-paid inefficient labour is by no means "cheap" labour. Many of the best employers recognise this, and for this reason are not always anxious to replace trained men by untrained women.

But when a greater subdivision of processes is introduced, the employment of women at lower wages is frequently found to reduce the cost of production. Some employers, *e.g.*, in the leather and small metal trades, state that they have been able to introduce female and other unskilled labour by means of modifications in their methods. Skilled workmen are thus in some cases undercut in the labour market as effectively as though women offered to do equal work for a smaller wage.

Fair Wages.—It is too generally assumed that the Fair Wages Clause included in all Government contract agreements sufficiently safeguards the standard of wages paid to women on Government work and secures to them a fair wage. This, however, is not necessarily the case. The Fair Wages Clause is framed apparently on the assumption that in the trades to which it applies, standard recognised rates of pay can readily be ascertained. In the same trade, however, very considerable diversities in methods of work and division of processes often exist which render the fixing of rates an extremely technical and complicated matter, necessitating the existence of highly organised machinery representative of both employers and workpeople. These necessary conditions are to be found least of

all in those trades which employ large numbers of comparatively unskilled women workers, and in such trades the Fair Wages Clause, save in most flagrant cases, is in consequence practically inoperative.

Certain of the worst-paid women's trades in which very large contracts have been placed during the war, *e.g.*, tailoring, shirt-making, and food trades, are scheduled under the Trade Boards Act, and though the results of this Act have been very considerable in raising the standard of piece-work rates in those trades, the securing of "fair" wages to *all* workers concerned is outside the powers of the Act. The Act can only secure that the piece-work rates paid are such as yield to an "average" worker not less than a certain fixed time rate. Adult women who since the war have transferred temporarily from depressed trades to those which are booming are often for the purposes of the Act classed as "learners" and employers need only pay them according to the learners' scale of wages, *e.g.*, a woman over 21 years of age who before the war earned 15s. per week as a bookbinder, transferred in December last from her own trade which was slack, to tailoring, in which there was a great demand for women's labour. She was engaged in a process of "finishing," known as "cleaning"—an unskilled process in which the necessary rapidity could be attained in about two days. For this an ordinary worker should have been paid for a fifty-five hour week at least 14s. 10 $\frac{3}{4}$ d. Her employer, however, obtained a learner's certificate in respect of her from the Office of Trade Boards, and after paying her on the learner's scale, *i.e.*, 7s. 5d. per week, for eleven weeks, dismissed her as the volume of Government orders had decreased, and she was no longer needed. In another case a Government contractor sub-contracted a large proportion of his contracts to small workshops at a rate which made it impossible for the sub-contractors to pay fair rates to their workpeople. Under the Trade Boards Act it was impossible to prosecute the contractor. These two cases are typical of many.

VI.—THE WOMAN WORKER AFTER THE WAR

Forecasting is usually most unsatisfactory, and in the present stage of transition would largely resolve itself into guesswork. Extremely interesting developments of women's employment are likely to occur within the next few months, but as yet they are

little more than in their incipient stages and it is not the business of this Report to anticipate their results.

Attitude of Employers to Men Returning after the War.—It has been, however, interesting to gather from employers their ideas as to the policy they intend to pursue after the war with regard to the men who will return. Much will depend upon the industrial and economic position and the rate of discharge from the Army. We have found that employers almost unanimously state that it is their intention to take back those of their former employees who return, not necessarily in their former positions, but at any rate in positions not inferior to those which they left, and in many cases definite promises have been given. In some cases—*e.g.*, the railways—the men have been promised to be taken back not only in their former positions, but in those to which they would in the natural course of things have been promoted. The change of taste and outlook will be a factor which after the war is likely to discourage some men from returning to their old positions. One large retail drapery store from which many men went during the South African war states that of those who returned to England only 6 per cent. wished to return to their former occupations. The problem then was, of course, insignificant compared with the present, and the instance given merely illustrates a factor which many employers feel will prevent a considerable number of men from returning to the workshop and bench and especially to the office.

In some cases, of course, the experience gained during the war has shown that certain jobs, *e.g.*, lift attendants, can be as efficiently done by women as by men. In such cases employers intend either to take back the men who return, and as they are promoted or fall out of industrial life, to substitute women in their places, or else to offer better jobs to the men and keep on the women. It is probable that when girls have replaced boys in blind-alley occupations they are likely permanently to remain, as they have proved in most cases more efficient and reliable and are likely to remain longer.

Attitude to Employment of Women after the War.—With regard to the women the problem appears to have been very little considered, most employers treating the extra employment of women as a purely temporary measure to be dropped on the conclusion of war. When friction has occurred with the Trade Unions with regard to the

replacement of men by women, an agreement has generally been arrived at in which the employer has promised to take on women for the duration of the war only. The general attitude to the women, therefore, is that at the end of the war they will be dispensed with.

It has before been noted in this Report that, so far as the present position is concerned, women in industry proper have for the most part had previous industrial experience. They have either come from trades which are depressed owing to the war, or from other branches of the same trade in which work was slack, or they are in a few cases married women who have returned to the trade, or else belong to the fringe of casual labour with which too many industries are badly embroidered in times of peace. Those who have been drawn from other industries will no doubt return as their trades revive, and the others will return to their normal occupations. In non-industrial occupations, with the exception of railways, a large number of the women are likely to continue working after the war.

Permanent Increase of Women's Labour after the War.—The great increase of women's employment can hardly fail to have permanent results, especially in non-industrial occupations such as clerical work and the retail distributive trades, where for many years a considerable increase of women's employment has occurred, these trades being peculiarly suitable for the further employment of women. It will probably persist in those manufactures where the processes are minutely subdivided and repetition work predominates. The newly built munition factories which are staffed by women may continue to be so staffed, if it is possible after the war to manufacture in these factories some product other than munitions. Where female labour is either underpaid or is obviously superior to male labour, a special inducement offers itself to employers to retain the women, and no doubt this will result in a number of the women remaining in industries after the war.

We may, therefore, anticipate that after the war the proportion of women in industry will be greater than before and the competition between men and women will increase. In order to minimise the bad effects which may result, the following measures suggest themselves—

1. The extensive emigration of women. At the close of the war

a considerable proportion of the men discharged from the Army will have acquired a taste for an open-air life, and may prefer the prospects offered by land settlement schemes. Unless, therefore, the respective sexes are to be distributed over the Empire even more unevenly than at present, steps should be taken to ensure the emigration of women in something like the same proportion as that of men.

2. The better technical training of both boys and girls. There seems little danger of a superabundance of highly skilled labour. It is the experience of all trades that, except in processes which have been superseded, the supply of highly skilled workers is usually less than the demand. If the material wastage of the war is to be repaired, the need of the country for skilled workers will be even greater in the future than in the past. There are signs that the Trade Unions are entering upon a policy of preventing the undercutting of men by women rather by regulating women's wages than by excluding them entirely from the more skilled processes. The highly paid skilled workers as a class are not likely to be detrimentally affected by the augmentation of their numbers, whether the recruits come from one sex or both. It is the almost inexhaustible reserve of cheap unskilled or semi-skilled labour which is their real danger.

3. An extension of the policy of equal pay for equal work, and, as a corollary, a minimum wage for unskilled labour both male and female. This policy (which could be most effectively enforced by organised labour itself) should be so framed as to prevent the employment of unskilled labour from being more profitable than skilled labour in those forms of production in which they can be alternatively employed, *e.g.*, engineering. It may be desirable also to give further powers under the Trade Boards Act, and to extend it.

4. A careful reconsideration of the half-time system.

5. The withdrawal of widows with young children from the labour market by the institution of an adequate pension scheme, at the same time introducing further restrictions with regard to home work.

STATISTICS

Appended are three tables. Tables I and II show the state of employment for industry as a whole at various dates from July to

February compared with employment in July, 1914. Table III shows the state of employment for those industries most affecting women's labour. The tables are prepared from three Reports on the State of Employment in the United Kingdom issued by the Board of Trade,¹ which form the best available records of the economic effects of the war on employment. The first (Cd. 7703) deals with the situation up to mid-October, 1914; the second (Cd. 7755) states the facts for December; and the third (Cd. 7850) is based upon an inquiry in the middle of February, 1915. There all information, as far as the public is concerned, stops short, though comprehensive inquiries are still taking place. In these official Reports little information is given with regard to non-industrial occupations such as railways, docks, shipping, the carrying trade, agriculture, clerks, and distributive trades; nor is information included with reference to Government employment in Woolwich Arsenal or elsewhere, which has expanded considerably during the

TABLE I

State of Employment at various dates since the Outbreak of War compared with State of Employment in July, 1914.

[Numbers employed in July = 100.]

	MALES.				FEMALES.			
	Sept. 1914.	Oct. 1914.	Dec. 1914.	Feb. 1915.	Sept. 1914.	Oct. 1914.	Dec. 1914.	Feb. 1915.
Normal time	60.2	66.8	65.8	68.4	53.5	61.9	66.6	75.0
Overtime	3.6	5.2	12.8	13.8	2.1	5.9	10.8	10.9
Short time	26.0	17.3	10.5	6.0	36.0	26.0	19.4	12.6
Total numbers employed .	89.8	89.3	89.1	88.2	91.6	93.8	96.8	98.5
Contraction of employment	10.2	10.7	10.9	11.8	8.4	6.2	3.2	1.5
Known by employers to have joined the Forces.	8.8	10.6	13.3	15.4	—	—	—	—
Net displacement (—) } or replacement (+) }	-1.4	-0.1	+2.4	+3.6	-8.4	-6.2	-3.2	-1.5

¹ See article "The Effect of the War on Industry," by W. T. Layton, in *Quarterly Review*, No. 442. Three articles on "The Influence of the War on Employment," by H. D. Henderson, in *Economic Journal*, December, 1914, and March and June, 1915, are also interesting contributions to the subject.

² A + (here and in Table II) indicates the extent to which any industry has been compelled to draw in new employees.

war. The October return covered 66 per cent. of the workpeople employed in large firms in industrial occupations and 10 per cent. of those in small firms. The December Report was based upon returns received from 23,000 industrial firms employing about 4,000,000 workpeople, or 43 per cent. of the industrial population, and the February return was even more comprehensive. The quality of the material thus provided is much superior to that upon which official unemployment returns are generally based, and it is to be regretted that no Reports have been published since last February, but it is to be hoped that later, the full Reports will be made available to those who wish to have access to these invaluable records of the economic state of the country during the war.

It is interesting to check the results in Table I with those obtained by Mr. Martin Holland in a unique return¹ from the whole of the Banks of England and Wales which throws considerable light on the movement of employment and wages during the first eight months of the war. Each bank computed the total of the cheques drawn for payment of wages in selected weeks. The following are the results—

Week ending—	Total of Wage Cheques in England and Wales.	The same expressed as percentages of the amount on July 27— Aug. 1, 1914.
	£	£
August 1, 1914	9,358,204	100
August 29, 1914	7,516,139	80·3
October 3, 1914	8,139,789	87·0
October 31, 1914	8,468,875	90·2
November 28, 1914	8,346,633	89·1
December 19, 1914	8,484,123	90·2
January 30, 1915	8,931,468	95·4
February 27, 1915	9,054,251	96·8
March 27, 1915	9,071,721	97·0

When allowance is made for the excess of short time in September and October and of overtime in December and February and for a slight rise in wages early in 1915, it is seen that the employment and the banking statistics are quite consistent with each other.

¹ *Royal Statistical Society Journal*, July, 1915.

TABLE II

An idea of the dimensions of the changes which Table I implies may be gathered from actual numbers. Applying these percentages to the approximate numbers occupied¹ (6,500,000 males and 2,500,000 females) in industrial occupations, according to the Census of 1911, we get the following approximate totals—

	MALES.				FEMALES.			
	Sept.	Oct.	Dec.	Feb.	Sept.	Oct.	Dec.	Feb.
On full time	3,913,000	4,342,000	4,277,000	4,446,000	1,337,500	1,547,500	1,665,000	1,875,000
Overtime.	234,000	338,000	832,000	897,000	52,500	147,500	270,000	272,500
Short time	1,690,000	1,124,500	682,500	390,000	900,000	650,000	485,000	315,000
Total employed. . . .	5,837,000	5,804,500	5,791,500	5,733,000	2,290,000	2,345,000	2,420,000	2,462,500
Contraction of numbers employed	663,000	695,500	708,500	767,000	210,000	155,000	80,000	37,500
Known by employers to have joined Forces . .	572,000	689,000	864,500	1,010,000	—	—	—	—
Net displacement (-) or replacement (+) . . .	-91,000	-6,500	+156,000	+243,000	-210,000	-155,000	-80,000	-37,500

¹ Results based on these figures are only approximate; for, on the one hand, there has been a growth of population since 1911; but, on the other, among those whom the Census calls "occupied," there are a certain number at any moment unemployed.

TABLE IV

The following table shows the number of males and females in England and Wales engaged in non-industrial occupations in 1911—

	Women.	Men.
General or Local Government	50,975	248,624
National	31,538	140,814
Local	19,437	107,810
Professions	347,043	355,307
Clerical (Religious)	14,215	52,358
Legal	2,159	55,486
Medical	87,699	38,313
Teaching	187,283	76,428
Literary, Scientific, and Political	5,689	25,499
Art, Music, Drama, etc.	49,998	107,223
Domestic and Institutional Service	1,734,040	387,677
Domestic Indoor Service in Hotels, Lodging and Eating Houses	63,368	12,226
Other Domestic Indoor Servants	1,271,990	42,034
Domestic Outdoor Service	104	226,266
Other Service—		
Hospital, Institution, and Benevolent Society	41,639	17,394
Day Girls, Day Servants	24,001	—
Charwomen	126,061	—
Laundry Workers	167,052	12,464
Others	39,825	77,293
Commercial Occupations	126,847	663,316
Merchants, Agents, Accountants	4,301	164,450
Commercial or Business Clerks	117,057	360,478
Dealers in Money: Insurance	5,489	138,388
Transport	24,474	1,399,394
On Railways	2,636	397,990
On Roads	2,821	471,994
On Seas, Rivers, and Canals	1,038	132,195
In Docks, Harbours, etc.	23	123,022
In Storage, Portage, and Messages	17,956	274,193
Agriculture	94,722	1,140,515
Farmers, Graziers, Farm Workers	90,128	971,708
Gardeners	4,594	168,807
Totals	2,378,101	4,194,833
Without Specified Occupations or Unoccupied	10,026,379	2,208,535
Retired (not Army or Navy) Pensioners	87,894	422,213
Private Means	295,712	52,432
Others aged 10 years and upwards (including Scholars and Students)	9,642,773	1,733,890
Totals	12,404,480	6,403,368

DETAILED REPORTS ON TRADES

In the following Reports on separate trades no attempt is made to be exhaustive, since in any case that is not possible under present conditions, and the amount of information that we have been able to obtain differs considerably as between different trades. Some details are, however, given in each case of the position of each trade owing to the war, and of the nature of the increased employment of women, especially with reference to those processes in which they have replaced or are likely to replace men.

The Report on the Metals and Engineering group was mainly drawn up from information received from the Birmingham district. The Leather and Tailoring Reports will be found interesting from the fact that they are trades into which women have been drawn in large numbers, but in which there does not appear to have been any considerable displacement of men by women. A Report on the Cotton trade is included mainly to show the effect of this trade upon the general figures for women's employment.

Reports on the possibilities of replacing men by women would not be complete without some mention of trades which, though depressed since the outbreak of war, offer scope for the further employment of women. Accounts of the Printing and Pottery trades are therefore given. Reports on non-industrial occupations—distributive trades, clerical work in banks and other offices, railway work and transport, and Government employment—are also included. Owing to the complicated nature of the question it has been thought inadvisable in the few weeks at our disposal to attempt any inquiry into Agriculture, although this occupation offers a number of interesting examples of replacement.

DISTRIBUTIVE TRADES

The retail distributive trades offer peculiar scope for the further employment of women, and since the outbreak of war the increase of women's employment has been more general in these than in most other trades and occupations. In the majority of firms this increase would have been larger but for the fact that there has been a diminution of trade, especially in those shops dealing in better-class goods; shops catering for a lower grade of goods have been comparatively

busy. The replacement of male by female labour in these trades is no new phenomenon, as is shown by the following table, but the shortage of male labour owing to the war has accelerated the process to a considerable degree.

At present the majority of employers consider their data and experience too inadequate to express final opinions as to the effects of the introduction or increase of women's labour.

Nature of Increase of Women's Work.—Since the war, women have replaced men and youths as saleswomen in all those lines where it has been customary for women as well as men to be employed, *e.g.*, stationery, toilet requisites, and prepared drugs. They have also entered, both as saleswomen and as shopwalkers, and in isolated cases as buyers, into those branches which have in the past been regarded for the most part, and especially in larger shops, as men's monopoly, such as grocery, provisions, fruit and greengrocery, chintz, etc., heavy fabrics, men's hosiery, and hardware (light articles only). Women are now employed in practically every type of shop and warehouse except where the work is too heavy, *e.g.*, ironmongery and Manchester departments of drapery stores; or highly technical, *e.g.*, scientific instrument shops. Women have made their first appearance as commissionaires and time-keepers, as lift-girls, and in the packing departments in sorting, checking, packing, and putting up orders, as well as in the dispatch departments. Some firms have appointed women on their administrative staffs, but rarely are women given positions of responsibility over men. Women are appearing for the first time on delivery vans, both horse and motor, as cycle-carriers, and as milk-vendors. Girls and young women have been employed in hundreds in place of boys for newspaper delivery and at railway bookstalls. In those branches of these trades in which the work is rough, such as dairy work and heavy van driving, the extra women who have been drawn in since the war have come from factories, domestic service, laundries, and other occupations where the work is heavy or unpopular or wages comparatively low. For the lighter work the women who have come in have either been in business before, generally in occupations in which there has been a contraction in employment owing to the war, *e.g.*, dressmakers and milliners and light luxury trades generally; or they are women from comparatively well-to-do families hit by the war; or girls of 15 to 18 years

The following table shows the increase per cent. of persons—male and female—employed in England and Wales in the chief distributive trades between the years 1901 and 1911—

TABLE A

OCCUPATIONS.	CENSUS OF 1901			CENSUS OF 1911			INCREASE OF DECREASE PER CENT.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
Hat, Bonnet, Straw Plait, etc.	5,751	3,815	1,936	11,116	4,417	6,699	+ 93.3	+ 15.8	+ 246.0
Clothiers, Outfitters . . .	22,107	17,701	4,406	36,642	27,045	9,597	+ 65.7	+ 52.8	+ 117.8
Boot, Shoe, Patten, Clog . .	21,886	14,223	7,663	33,466	22,114	11,352	+ 52.9	+ 55.5	+ 48.1
Drapers, Linen Drapers, Mercers	135,657	67,220	68,437	150,968	66,362	84,606	+ 11.3	- 1.3	+ 23.6
Milk-sellers, Dairy-men . . .	40,901	35,338	5,563	56,971	46,700	10,271	+ 39.3	+ 32.2	+ 84.6
Cheese-mongers, Buttermen, Pro- vision Stores . . .	20,882	16,510	4,372	24,567	18,448	6,119	+ 17.6	+ 11.7	+ 40.0
Butchers, Meat Salesmen . .	109,015	105,165	3,850	135,133	123,252	11,881	+ 24.0	+ 17.2	+ 208.6
Fish-mongers, Poulterers, Game, etc.	32,267	28,746	3,521	44,684	36,999	7,685	+ 38.4	+ 28.7	+ 118.3
Corn, Flour, Seed Merchants .	16,457	15,486	971	20,168	17,946	2,222	+ 22.6	+ 15.9	+ 128.8
Bakers, Confectioners . . .	72,197	30,402	41,795	109,933	43,691	66,242	+ 52.3	+ 43.7	+ 58.5
Grocers, Tea, Coffee, Chocolate Dealers . . .	193,569	151,184	42,385	219,619	165,981	53,638	+ 13.5	+ 9.8	+ 26.5
Greengrocers, Fruiterers . .	52,627	40,700	11,927	72,289	51,813	20,476	+ 37.4	+ 27.3	+ 71.7
Others in Food . . .	3,884	3,618	266	4,850	4,406	444	+ 24.9	+ 21.8	+ 66.9
Tobacconists . . .	16,870	10,200	6,670	21,298	11,702	9,596	+ 26.2	+ 14.7	+ 43.9
Multiple Shop, Multiple Store Pro- prietors, Workers (General or Un- defined), General or Unclassified Shopkeepers, General Dealers .	51,576	23,539	28,037	90,077	41,819	48,258	+ 74.6	+ 77.7	+ 72.1
Dealers in Precious Metals, Jewel- lery, and Watches . . .	4,763	3,855	908	14,906	12,077	2,829	+ 212.9	+ 213.3	+ 211.6
Dealers in Instruments, Toys, etc.	4,724	2,881	1,843	7,672	5,115	2,557	+ 62.4	+ 77.5	+ 38.7
Stationers, Law Stationers, other Dealers in Paper . . .	22,335	12,652	9,683	26,695	13,989	12,706	+ 19.5	+ 10.5	+ 31.2
Book, Print Publishers, Sellers .	14,788	12,235	2,553	16,864	13,498	3,366	+ 14.0	+ 10.3	+ 31.8
Chemists and Druggists . . .	28,448	25,343	3,105	32,241	26,851	5,390	+ 13.3	+ 6.0	+ 73.6

of age mostly from secondary schools. In comparatively few cases are married women quoted as returning.

Various estimates ranging from 50 to 100 per cent. are given as to the amount of increase of women's labour in these trades. The Trade Unions concerned anticipate a continued increase in women's employment, and point to the grocery trade, where already the numbers have doubled. It has been found impossible to obtain sufficient information in statistical form to be able to quote figures.

Amongst a number of employers there is still a considerable reluctance to engage women on work previously done by men. Some of them prefer to run their businesses with insufficient staff rather than take on women. The reasons stated for this reluctance are :

(a) Women are untrained. The male employees lost were to a large extent skilled men, and their places cannot be taken by men or women without the necessary technical experience. This was stated to be the case by certain firms dealing in jewellery, ironmongery, furniture, books, and drugs. The normal recruiting to the trade in the case of male labour is by boys and youths who are promoted as they prove efficient.

(b) It is not worth training women, as many of them are not likely to remain in the trade. It is stated that the possibility of marriage causes her attitude to her work to be less stable than the attitude of the men. Uncertainty as to the duration of the war also influences employers in this respect.

(c) The work is too heavy or dirty, *e.g.*, in furniture and piano shops and the meat and fishmongery departments of general stores. In the heavy departments of drapery firms employers are apportioning the heavier work to the men and the lighter to the women. A firm employing women in its dispatch and packing departments has arranged that only men shall transfer cases to the warehouse. Some dairies with many branches have had to reduce the number of calls for women on milk rounds, giving a few extra to each man. A firm employing women at the fish and meat counters does not ask them to prepare and clean the fish.

(d) As staying power is essential even when actual physical strength is not, women are not found capable of so large an output as men. This was the view expressed by 85 per cent. of the employers visited, some quoting comparative figures. Thus, a large provision merchant uses three women for two men's work,

a dairy has had to put in two women where one man sufficed, and has had to reduce the number of calls in the women's rounds ; a general store and a hardware firm put the value of a trained woman at 75 per cent. of that of a man. Many employers allow that output is, to a large extent, a matter of training and practice, but in spite of this they consider women of less efficiency than men when tested by output or staying power, the cause being partly physical and partly psychological. Men generally enter these trades as boys, and the trades are "picked up." Definite schemes of training are almost non-existent save in very large stores, where lectures are sometimes given. The London County Council Higher Education Committee has started a scheme for training women in the grocery trade, but it is premature to attempt an analysis of the results. Employers prefer "experience" to "lectures." Men acquire experience and knowledge over a period of years, and it is obvious that adult men or women from other trades find it extremely difficult to compete with, or to do the work of, those having years' experience of the trade. Men enter the grocery trade as boys of fourteen, in circulating libraries they enter at the same age, and "it takes years to produce a good salesman of fabrics." Obviously adult women are heavily handicapped under such conditions.

(e) Though painstaking, women do not possess initiative in the same degree as men, and often they lack interest in their work. A few employers absolutely deny this.

In spite of these objections women have for some years past been entering these trades in increased numbers, as shown in Table A, and while a majority of employers maintain reasoned objections to women's employment, such as physical disabilities and the probability of their withdrawal from the trade on marriage, a minority are no doubt largely influenced by the custom of the trade in regard to their employment. When asked : "If you could get men would you employ them in preference to the extra women that you have taken on?" 50 per cent. of employers stated "No"; 28 per cent. said "Yes"; and 22 per cent. were doubtful. Patriotic as well as economic motives, however, largely influenced these replies. Employers are generally very cautious in taking on women for new work, and in few cases, so far as could be discovered, had experiments proved failures. Trade Union opinion agrees that women's efficiency is lessened by (1) physical strength, (2) marriage,

though obviously the former depends very much upon the kind of work done.

One particular job in a shop generally consists of several processes, some light and some heavy, some skilled and some less skilled. Obviously there is difficulty in introducing untrained men or women into such a system unless reorganisation and subdivision of work are effected. This apparently has been very rarely done.

From the report of one large firm, where great and marked success and enterprise render the opinion of its manager valuable, it appears that such reorganisation and subdivision of labour are advantageous. He says that, thanks to careful subdivision prior to the war, he has not found it necessary to put on more women to do the work of men; that the majority of the women with some experience are capable of the same work, and can, therefore, earn the same pay. For example, the women commissionaires and lift attendants were not expected to put up shutters and scrub out lifts; the delivery men had no cleaning or repairing of their vans to do; and in the provision department the salesmen whom the women replaced were doing no heavier work than a woman is capable of doing. A considerable subdivision of work is, however, less possible in small shops than in large stores. One employer, who was typical of many, when questioned on this point, replied that "Such subdivision is more arduous than manipulating the pieces at a game of chess." The reluctance of some employers to reorganise their businesses on these methods has made the task of taking on women and releasing men more difficult.

Wages.—The question of wages is a difficult one. Only in very exceptional cases can piece rates be paid. Throughout these trades time rates are the rule, though commissions are often earned in addition to fixed wages. It is obvious from all reports that, with very few exceptions, women's wages are less than the wages of men. This is due to:

(a) A difference in the work done by men and women. Very few women are said to be doing exactly the same work as that previously done by the men replaced.

(b) The smaller output of the women who have replaced men and the probable lack of continuity of their work.

(c) Social and personal factors. Women ask and are paid less wages. Custom also plays a considerable part.

As women are for the most part untrained and are often doing the work of boys and youths, and rarely the full work of men, it is difficult to prepare any comparative table of wages. One can give only a few examples.

One chemist employing dispensers states that women get the same wages as men, or even more if they are more skilled. The question is entirely one of skill.

A firm employing women instead of boys and youths as messengers and lift attendants pays them 10s. to 15s., where youths, after some experience, got 12s. 6d. to 18s. and two meals.

A jeweller employing casual labour to clean silver paid a woman 15s. where a man would have got 30s., though she was acknowledged to be as good.

A dairy is paying women on milk rounds 19s. 9d. where men got 25s. The number of calls is, however, reduced. Another dairy is paying a woman 16s. a week for washing cans where a man got 26s. In this case, however, two women are employed to do the work of one man. In the majority of cases three women seem to do the work of two men.

In the grocery trade three-quarters of the men's wages is felt to be as much as can be asked for by a section of those interested in the question of women's wages.

Many of the wages at present fixed are to a large extent experimental, and they differ very much between different firms and districts. The Trade Union concerned, though in theory in favour of equal pay for equal work, does not endeavour to secure equal pay. It tries to secure three-quarters of the men's pay for women everywhere except in London, where the demand is four-fifths. It is stated that the best shops pay men more than the minimum demanded, while few pay the women as much. In the second grade shops men are, for the most part, paid the minimum, but very few women attain it. Still a large number of shops do not pay to women one-third of the minimum demanded for them by the Union. The majority of employers state that untrained women's labour is not cheap labour and that women require more supervision than men. Since the war their wages bills for the same output have been heavier than before. One provision firm, having many branches throughout London and the country, stated that the value of male labour over female is approximately 30 per cent. on the same wages.

Some firms stated that the difference in the wages of trained men and women is greater than is the difference in their efficiency. They generally referred to social custom as explaining this discrepancy. For the most part women shop assistants are unorganised, though a considerable number have joined a Union since the war.

33.3 per cent. of employers expressed a belief in equal pay for equal work, 27.7 per cent. stating that they were paying it. As the character of most of the work prevents the fixing of piece-rates, the employers' opinion alone can fix the question of equal work. One states that he pays "according to the man's or woman's capacity," another that he believes in equal pay "where the women do the same work and the same amount without supervision."

Of those who do not believe in equal pay for equal work 50 per cent. say women ask for less and get less, and 50 per cent. that "being women" or "having only themselves to support," they get less.

All employers visited say they are ready to take back their men when and if they return. They do not, however, expect this problem to be a serious one. Youths in many cases are now doing the work previously done by men, and women have taken the boys' places. Where women have taken the place of boys and youths, *e.g.*, on lifts, they are likely to remain. The opinion is often expressed that many of the men who return will not wish to return to a sedentary life. One large drapery firm instanced that after the South African War only 6 per cent. of their men wished to return. Many employers think that women will not wish to remain at rough, outdoor work such as milk delivery and van-driving, especially during the winter months. Many of the women themselves, and especially those from better class families, regard their entry into the trade as a temporary one, though, on the other hand, women from occupations such as domestic service and factory workers intend if possible to remain. Many of the women introduced are young and are now learning the trade and are not likely to wish to leave it. The majority of employers seem, even reluctantly, to have accepted the fact of the further entry of women into these trades and they are now experimenting and testing. They are unwilling yet to give final opinions, and the above inadequate statement of the problem reflects generally the views of the trade.

It is difficult to draw definite conclusions from information which

cannot fully be produced in statistical form, but the following general remarks are suggested by the foregoing evidence :

(1) The replacement of men by women has occurred to a larger extent in the distributive trades, and especially in grocery, than in most other trades and occupations. Practically the only limitations to women's employability in these trades have been in work requiring physical strength or technical knowledge.

(2) The movement of labour into these trades has been from trades which are depressed owing to the war, such as millinery, dressmaking, and luxury trades generally. Girls from 15 to 18 years of age, mostly from secondary schools, and women from comparatively well-to-do families hit by the war, have also been absorbed to a considerable extent. The movement into the heavier branches of the trades has been largely from lower-paid or less attractive occupations, such as some kind of factory-work, domestic service, and laundry work. In few cases have married women returned.

(3) In the opinion of the majority of employers, the actual value of a woman as a worker is about 30 per cent. below that of an average man employed in the same capacity, the difference being due partly to physical strength and partly to incapacity of continued employment because of marriage.

(4) A minority of employers, however, finds that, with improved organisation and greater subdivision of processes, many places can be found for women in which their economic value is equal to that of an average man.

(5) The actual wages of women tend to be lower in proportion to those of men employed in similar capacities than would be justified even by a less favourable estimate of their economic value. This discrepancy appears to be due to custom and to the inferior economic status of women as workers.

RAILWAYS

1901 Board of Trade Returns—Total (Men and Women)	= 575,834
1913 " " " Total " "	= 643,135
	= 11·6 increase per cent.
1901 Census, Women = 1,411.	1911 Census, Women = 2,636
	= 86·8 increase per cent.

Prefatory Note.—Since this Report was written an agreement has been reached between the railway companies of Great Britain

and the National Union of Railwaymen, to take effect as from 16th August, 1915, in regard to the rates of wages paid to men. This agreement is as follows :

“ An assurance was asked for and given that the employment of women in capacities in which they had not formerly been employed was an emergency provision arising out of the circumstances created by the war and would not prejudice in any way any undertaking given by the companies as to the employment of men, who had joined the colours, on the conclusion of the war.

“ It was agreed that the employment of women during the war in capacities in which they had not been previously employed is an emergency arising entirely out of the war, and is without prejudice to the general question of the employment of women.

“ The pay of women employed in grades in which they were not employed prior to August, 1914, shall, for the duration of the war, be the minimum pay of the grade.”

Its application, therefore, is to women employees on the operative staff only (and not the clerical staff) and includes :

Ticket collectors and examiners, messengers, halt and platform attendants, office porters, pneumatic tube attendants, checkers, shippers, weighbridge clerks, time-keepers and carriage cleaners.

In respect of carriage cleaners, as in the case of one or two other occupations, *e.g.*, ticket collectors and halt attendants, women were employed in these capacities in small numbers, and on certain railways prior to the war, but their employment was so exceptional, that for the purposes of this agreement it was decided to regard them as occupations new to women. It follows from this arrangement that women are henceforth liable to the same hours of work as the men and the same conditions of service, so that if, for instance, it seems convenient and desirable to put women carriage cleaners on the outside work, there is no technical reason which can be urged against their being so employed.

Many of the remarks made in this Report on the question of women's wages and hours of work are consequently rendered inapplicable at the present moment. It has not, however, been thought desirable to exclude or modify these remarks, and for this reason. The agreement with regard to women's rates, just as the employment of women in capacities new to them, is clearly understood to be an emergency provision, arising out of the circumstances of the war,

and forms no precedent whatever. This understanding applies equally to their hours of work.

The position, therefore, is this: if women prove themselves capable of performing equal service with men under equal conditions of work, then the case against their employment on the railways falls to the ground and they cannot be excluded. Further, instead of remaining content with the present agreement to pay the minimum rate of the grade occupied, they will be justified in demanding the increases customary in the men's scale. If, on the other hand—and this seems to be the more likely event—they prove unequal to the demands made on their physical powers and general ability to cope with the work, then the question of their partial employment, with shorter hours and lighter work, may come up for reconsideration. In the former case no argument is possible, but in the latter there are advantages and disadvantages to be weighed, and it is because some attempt has been made to review these that this Report is left in its present form. The experiment that is now to be tried of giving women equal work and equal wages is one of great interest. It remains for experience to throw light upon various important questions, as, for instance, whether the wages bill will increase, whether women possess unsuspected abilities for this kind of work and will justify the consideration of their permanent employment in the new posts. But, it is necessary to repeat, if it should happen that women do not realise the highest expectations, that will not in itself justify the total exclusion of them from these branches of the service. If we should be faced with a shortage of men after the war, a subdivision of labour, by which women do some of the easier work, with shorter hours and lighter responsibilities, may well prove to be a desirable and necessary step. And in that case it seems worth while to state the conclusions reached in this Report with regard to wages and hours, even though not applicable in the present conditions, because at first sight the apparent injustice of a lower scale of pay for women is likely to be misleading, unless the actual character and value of the services which women can perform in these new branches are carefully weighed.

For these reasons the Report is left in its present form, with the understanding that the new agreement temporarily suspends the conditions as to wages and hours here represented, and with the

hope that the agreement, when put into practice, will shed some light on the always difficult question as to how far women are capable of giving service of precisely equal value with men.

Outdoor Staff.—It seems to be not generally understood that the increase in the employment of women on the railways has arisen entirely out of the emergency created by the war. The companies have encouraged enlistment among their employees, provided due notice of their intention is given, and in consequence a steady flow of recruits has been maintained, the total enlisted from the railways up to the present time being estimated at 89,000 to 90,000, or about 14 per cent., at which point it is thought the margin of possibility has nearly been reached. Enlistment among those engaged in the manipulation of traffic, though less than in other branches, has been sufficient to demand the introduction of women into new branches. The demand up till now has varied considerably with the different railways; in one company 263 extra women have been taken on, in another 170, but in others much smaller numbers.

The grades chiefly affected are those of carriage cleaners, ticket collectors, and checkers. On 31st December, 1913, there were 305,000 men engaged in the manipulation of traffic, of whom carriage cleaners = 6,531; ticket-collectors = 3,741. The number of women on the railways is returned in the 1911 census as 2,636, of whom 1,120 were clerks, etc., and 1,156 were "other railway servants." Women are also being employed experimentally in smaller numbers as messengers, weighbridge clerks, timekeepers, invoice checkers, office porters, and hall attendants, and by one company at least as dining car attendants. The increased employment of women in the offices is considered separately. The employment of women as carriage cleaners dates from some two years back, but though their work as such compares very favourably with that of men in quality, it appears still to be an open question whether this will be a permanent occupation for women. Hitherto they have worked an 8-hour day, against the men's day of 10 hours. The quality of their work is in some respects superior to that of men, but in quantity it is relatively less. Some companies state that they have to employ a proportion of three women to two men, or of six to five, to get the same amount of work. Piecework records show that women will generally earn 10 per cent. less than men on the same work. There are the further objections that women

are not so well fitted to do the outside, but only the inside cleaning ; that it is generally necessary to have platform or siding accommodation for the cleaning of carriages, as it is regarded as undesirable and dangerous to have women cleaning carriages on the permanent way. Nevertheless the war has given a considerable impulse to the employment of women as carriage cleaners—one company has taken on 140 additional women, which is one-sixth of its total of male carriage cleaners employed before the war, and they are likely to continue this occupation for some time to come. The effect of the new agreement in regard to hours, introducing a 60-hour week for women (as compared with 47 hours in 1913, increased more recently to 48), must remain as yet uncertain, but it is likely that, though their work may continue to be satisfactory, the women themselves may at the end of the war demand a return to the *status quo*.

The introduction of women ticket collectors and checkers, on the other hand, is almost entirely a new departure, their total in the census of 1911 being returned as 19. Now one company alone has 78, which is just under one-sixth of the total of men so employed before the war. Three companies had recently a total of 169 women ticket collectors. One fact which has facilitated the introduction of women with little or no previous training, is the suspension of cheap bookings and excursion tickets, simplifying the work as compared with a normal summer season to a very appreciable extent.

It is still early to form a judgment as to the suitability of ticket collecting as a permanent occupation for women, and it is made more difficult by the fact that existing conditions are not normal. Thus doubt is generally expressed whether in normal times an equal number of women ticket collectors would be sufficient to cope with the work formerly done by men. One railway company at least, it is true, has followed the policy of substituting one woman for each man gone, and finds the work is satisfactorily performed—women working one hour less at main stations. Another company, on the other hand, has substituted three shifts of women for two of men, and proposes to continue this arrangement for the present. Prior to the new agreement, women were working shorter hours than men at main stations—at Paddington, for instance, they worked one hour per day less—and it remains to be proved whether, as a permanent arrangement, three shifts of women will not be

necessary, or at least desirable, to do the work of two shifts of men. In the first instance they were not employed, generally speaking, before 7 a.m. or after 9 p.m., whereas men are liable to duty between the hours of 5 a.m. and 1 a.m., but it was soon recognised as improbable, if not impossible, that this distinction could be permanently maintained. Even when the system of three shifts of women for two shifts of men is accepted, it still remains doubtful whether equal efficiency is obtained, and it is clear that, apart from the demand for men for war service, the companies are not yet converted to any change of policy and, for the present at any rate, generally prefer men ticket collectors to women.

The chief objections to the employment of women ticket collectors are :

1. The limitations to their sphere of activity.
2. Their comparative inability to deal with extra or sudden pressure or with the rougher classes of passenger traffic.

These two disabilities, in combination, constitute a serious obstacle ; thus at main stations and junctions, while specialisation and subdivision of functions render the first objection inoperative, the second objection is strongly accentuated. At provincial stations the position reverses itself and it is the first objection which is operative, while the latter is absent. The provincial ticket collector often discharges a variety of duties involving considerable training, endurance, and initiative, so that the introduction of women is regarded as undesirable except where the sphere of activity is limited to the issuing and collecting of tickets, and such other light duties as checking, invoicing, and the telegraph.

There are further obstacles in the isolation of outlying offices, which could not be put in the sole charge of women, as they are in the case of men, and in the mobile character of the work, which frequently involves the transferring of workers in the lower grades from one district to another. It is generally admitted that even if it were desirable on other grounds, women show themselves less adaptable than men to such change of surroundings and of routine.

Finally the shorter hours, and the exemption of women from early and late turns, which the subdivision of work makes possible in the case of main stations, are obviously impossible in the case of small provincial stations where a single booking clerk is employed.

Within limits, therefore, the employment of women as ticket

collectors both in main and in provincial stations appears to be practicable, but it is not capable of indefinite extension and is further complicated by the question of early training, which would have to be much more seriously considered if the employment of women were regarded in the light of a permanent change instead of, as now, a purely emergency measure. Because it is an emergency measure and because of the abnormal condition of traffic, the unusual procedure of introducing women without training can be justified. Normally, the ticket collectors are recruited from the porters, and the direct introduction of men or youths from outside the railway service for such duties is a quite exceptional occurrence, though one railway company apparently follows this method and recruits only a very small percentage of its ticket collectors from among its porters. In consequence a newly-appointed collector has, as a general rule, three or four years' varied experience behind him, which has a considerable practical application to his new routine. But in view of the strong expression of opinion against the permanent employment of women as porters, it is difficult to see how women can receive any such practical training for the duties of ticket collecting. In any case the balance of advantage must always rest with the men, because it would be unsuitable for women to enter the railway service on the operative side (as contrasted with the clerical) at as early an age as men.

Of the men's attitude towards the question, different accounts are given. The position of the ticket collector is a popular one, being regarded on the one hand as a "soft" job and on the other as the stepping-stone to the position of guard, inspector, and other responsible posts. Therefore, in the case of the more unambitious and conservative men, their attitude is not unlikely to be, and in some instances is reported to have been, unfavourable. The entry of women, as one railwayman expressed it, is "forcing" the men to accept promotion. It is natural to find this opinion reversed in the case of the more ambitious men, because the employment of women in the less responsible posts and without any expectation or desire of promotion, must tend to accelerate the promotion of the men. The Railwaymen's Union has opposed this division of the work into skilled and unskilled labour, but so far as the employment of women is concerned it is difficult to see how this can be otherwise, in view of the special disabilities of women, the difficulty of training them

for posts of responsibility, and the comparative shortness of their careers in the service.

A second objection raised by the men is that women monopolise the middle or favourite turns, and the more mechanical part of the work, while the rougher, harder, and more responsible duties, with the late evening and early morning turns, are laid on the shoulders of the men. This objection is not universally applicable, however, even now, and in any case it is admitted that this distinction could not be permanently maintained, and it is probable that ultimately the arrangement would be to employ women during the working hours of 5 a.m.—1 a.m. in three shifts.

Against the view, freely expressed, in some quarters, that the entry of women to this branch is a menace to the men's position, this much may be said, that from the employers' point of view, it is of vital interest that they should maintain the efficiency of the men ticket collectors, as being a considerable recruiting ground for the higher branches of the service, and that the employment of women in the more mechanical duties of the service can only have the effect of equipping the men all the better for higher responsibilities. This need of a permanent source of supply of efficient men renders unlikely any attempt to lower the standard.

In conclusion, it may be mentioned that the great flood of applications received by the railway companies proves the great attraction which this new occupation possesses for girls. A large number, but not all, are daughters or relatives of companies' servants; others are stated to have come from restaurant work and other depressed occupations.

Of the minor experiments, that of the dining car service is the most important. The G.W.R. is already employing women in this branch, and no reason is found against extending their employment to cover the whole service. On the other hand, an unsuccessful experiment is reported from one of the Northern railways, whose experience on a trial trip was that women lacked the nerve for carrying dishes on a moving train. In regard to women platform porters the experiment is being tried, but not on a large or systematic scale, and their permanent employment is unlikely; the objections which are raised in regard to other branches apply with increased force to this service. Porters have in some instances been recruited from among the women carriage cleaners.

Clerical Staff.—A considerable extension in the employment of women has occurred in recent years, and the results have surpassed expectations. As telegraph clerks and telephonists they have been employed for years with satisfactory results. As correspondence clerks their claims have been long established. A more recent step has been the employment of women in goods and parcels offices, in the work of invoicing and checking, and in particular as booking clerks. The establishment of a training school by the L.B. & S.C.R., where girls of 15–16 are given three to four months' training in these duties, is evidence of the considerable impulse given to the employment of women in these branches since the war.

Conditions in the railway service are said by Trade Unionists to have become increasingly favourable to the employment of women in recent years, since the reduced competition between different systems has had the effect of making the standard of efficiency required from the railway clerk less exacting. The objections to their employment in certain branches, the goods department, parcels office, weigh office, invoicing, checking, etc., are substantially the same as in the case of ticket collectors, and in some instances apply with greater force :

- (1) Limitations to women's sphere of activity.
- (2) Isolation of railway clerks in outlying offices.
- (3) Mobile character of the work, frequently involving transference from one district to another.
- (4) The difficulty of a practical early training.
- (5) Women have the easier work, while men take the night work and late evening and early morning turns.

In regard to the limited sphere of women's activity, a point of special importance is the variety of functions demanded from clerks, more particularly in smaller stations. They issue tickets, dispatch luggage and parcels, manage the telegraph, make inquiries for missing or injured packages, and, most important of all, discharge certain directive functions in giving orders in the case of trains delayed, which involve visits to the signal box, goods shed or shunting yard. Their position being in many instances almost the equivalent of under station-master, it is obvious that women are handicapped by their shorter and less thorough experience.

In the case of booking clerks, the great increase in the employment of women since the war has been greatly facilitated by the suspension

of cheap bookings and excursion tickets and the consequent simplification of the work. It is generally believed that in a normal season and in a large station, where the system of classifying tickets is very complicated, women would be unequal to the strain and difficulty of the work. In small provincial stations the variety of functions discharged is an obstacle to their employment as booking clerks; consequently the permanent employment of women in this capacity is limited to the easier posts in large stations and wherever specialisation and subdivision are such that the booking clerk's work is, in fact, restricted to booking.

Wages.—It is a very difficult matter to compare rates of pay received by men and women in the railway service. Where it is a clear case of equal work, as in the case of carriage cleaners, the principle of equal pay has come to be generally accepted by the companies. The wage paid to carriage cleaners in one company employing 140 women has taken the following course—

	MEN.			WOMEN.		
	Wage.	Hours.	Hourly Rate.	Wage.	Hours.	Hourly Rate.
1913 . .	s. 21	60	d. 4·2	s. 15	47	d. 3·98
1915 . .	21	60	4·2	16	48	4·0

War Bonus granted . . . Men, 3s. Women, 2s.

Piece rate records show that women will generally earn 10 per cent. less than men on the same work, but having regard to the shorter hours worked by women and the good quality of their work in this service, it seems probable that their net efficiency is little if any less than that of men. Another company pays its women carriage cleaners 18s. a week, where men formerly received £1. See appended Table of particular instances of comparative rates paid to men and women :

Carriage Cleaning—

Men.

- (1) 30s. compared with
- (2) 21s. for 47 hour week plus piece-rates, yielding in total up to about 32s. for a 60-hour week.

Women.

- 21s.
- 16s. plus War Bonus of 2s. for the normal 47-hour week, no overtime allowed.

	<i>Men</i>	<i>Women.</i>
(3)	21s. 6d. plus War Bonus 3s. = 24s. 6d.	18s. plus War Bonus 2s. = 20s.
(4)	20s. 6d. plus War Bonus 3s. = 23s. 6d. for 1st six months. By agreement 21s. 6d. and War Bonus for 2nd six months = 24s. 6d.	18s. plus War Bonus 2s. = 20s. for 60-hour week.
(5)	18s. for 10-hour day plus over- time (at rate of time and a quarter) plus night work.	16s. per 9-hour day with no night work and less hours on Sunday. No overtime.

1915. August 23.—Agreement reached in all Companies that for the duration of the War, women cleaners should receive the same wage as men and work the same hours. [*Prefatory Note.*]

Traffic Department.—The basis generally adopted in the case of women ticket collectors has been to pay them 3s. a week less than the scheduled rate for the position. Thus on one system women are receiving 24s. instead of the men's rate of 27s.; on another, 20s. instead of 23s. Seeing that women are appointed direct to the post without previous training, whereas men graduate from lower grades, this was regarded as a fair and liberal arrangement, and the experience has been that women are only too ready to come in on these terms.

From what has already been said on the subdivision of labour among women and men ticket collectors, it is clear that the value of women's work is less than that of men and that this difference in the rate of wage no more than expresses the superior training of the men, and the more arduous, difficult, and responsible nature of the men collectors' work.

The danger of undercutting, which is being urged in some quarters, does not appear to be very serious in view of the importance to the companies, fully recognised, of the efficiency of the men ticket collectors, as being the chief source of supply for the more responsible posts of the service, in consequence of which any attempt to level down this branch of service to the plane of semi-skilled or lower grade labour would be suicidal.

Ticket Collecting—

	<i>Men.</i>	<i>Women.</i>
(1)	23s.	20s.
(2)	27s.	24s.
(3)	23s.	18s. plus 2s. War Bonus.
(4)	25s. minimum 28s. maximum	} plus War Bonus 3s. 22s. no Bonus.
(5)	23s. plus War Bonus 3s.	
(6)	25s. plus War Bonus 3s.	20s. plus 2s. War Bonus. 20s.

The fact that a woman will remain a comparatively short time in the service makes the woman a bad investment to the employer, in compensation for which he keeps her rate of pay, generally speaking, practically unchanged during the last five or six years of service ; the woman, on the other hand, is sometimes compensated for the lack of prospects and less training than men, by a relatively higher wage in the earlier stages of her career. In some instances (see appended tables) she is paid actually a higher wage between the ages of 16-19 than the youth of corresponding age on the same work. With a man the position is reversed, since in the earlier stages he accepts a relatively low rate of wage, regarding the remuneration of his services as being in part paid in training (which in itself implies prospects) and part, as it were, held in trust, to be paid in after years by a series of promotions and a rate of pay relatively much higher.

With these considerations in view, that a woman's inferior training and prospects handicap her somewhat unfairly in competing with men on the operative side of the railway staff, there seems to be good ground for pressing the extension of the policy of paying women a proportionately higher rate during the early years of service. As regards the future of the railway clerk, the Unions view it with some misgiving ; the increased employment of women on the clerical side of the service is, in fact, much more likely to be permanent than on the operative side, and in certain branches it may be even further extended. Decreasing competition between the different systems during recent years, it is argued, must end in lowering the standard of efficiency demanded from railway clerks and is likely to lead to a further increase in the employment of women, and this, it is feared, will have a depressing effect upon the men's wages. The disabilities of women as compared with men in several branches of the clerical service, and the fact that the harder and less pleasant work and the early and late turns must continue to be performed by men, constitute a strong argument in the men's favour, and the right policy seems to be to insist on the higher value of the men's service and to demand the maintenance of their present rates of pay, rather than to demand what is less justified by the facts, the raising of women's rates to an equality with those paid to men.

SCALES OF PAY FOR WOMEN CLERKS IN RAILWAY OFFICES.

*Railway A.**Railway B.*

Age.	Women's Rates per week.	Men's Rates per week.	Differ- ence per week.	Age.	Women's Rates per week.	Men's Rates per week.	Differ- ence per week.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>		<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
16	6 11	11 6	4 7	15	5 0		
17	9 2	15 4	6 2	16	10 0	10 0	
18	11 6	19 2	7 8	17	12 0	12 0	
19	13 10	23 0	9 2	18	14 0	14 0	
20	16 1	24 11	8 10	19	17 0	17 0	
21	18 5	26 10	8 5	20	20 0	20 0	
22	20 9	28 9	8 0	21	20 0	22 0	2 0
23	23 0	30 8	7 8	22	20 0	24 0	4 0
24	25 4	32 7	7 3	24	20 0	26 0	6 0
25	25 4	34 6	9 2	25	20 0	28 0	8 0
26	25 4	36 5	11 1	26	20 0	30 0	10 0
27	25 4	38 4	13 0				

Railway C.

Age.	Women's Rates per week.		Men's Rates per week, Col. 3.	Differences.	
	Managerial Staff, Col. 1.	Others, Col. 2.		Cols. 1 and 3.	Cols. 2 and 3.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
16	12 0	10 0	11 6	6*	1 6
17	14 0	12 0	15 4	1 4	3 4
18	16 0	14 0	19 2	3 2	5 2
19	18 0	16 0	23 0	5 0	7 0
20	20 0	18 0	26 10	6 10	8 10
21	22 0	20 0	30 8	8 8	10 8
22	24 0	20 0	30 8	6 8	10 8
23	26 0	20 0	34 6	8 6	14 6
24	28 0	20 0	34 6	6 6	14 6
25	30 0	20 0	38 4	8 4	18 4

* Increase.

NOTE.—The scale for men quoted above is that applicable to London. For the Provinces it does not go beyond 30s. 8d., and in calculating for Provincial Towns this must be adjusted.

Railway D.

Age.	London Stations.			Provincial Stations.		
	Women's Rates.	Men's Rates.	Difference.	Women's Rates.	Men's Rates.	Difference.
	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
16	10 0	11 6	1 6	10 0	11 6	1 6
17	12 0	13 5	1 5	12 0	13 5	1 5
18	14 0	15 4	1 4	14 0	15 4	1 4
19	16 0	17 3	1 3	16 0	17 3	1 3
20	18 0	19 2	1 2	18 0	19 2	1 2
21	20 0	23 0	3 0	20 0	23 0	3 0
22	22 0	26 10	4 10	22 0	24 11	2 11
23	24 0	28 9	4 9	24 0	26 10	2 10
24	26 0	30 8	4 8	26 0	28 9	2 9
25	28 0	32 7	4 7	26 0	30 8	4 8
26	28 0	34 6	6 6	26 0	32 7	6 7
27	28 0	36 6	8 6	26 0	34 6	8 6
28	28 0	38 4	10 4	26 0	34 6	8 6
29	28 0	42 2	14 2	26 0	34 6	8 6

The Provincial Rates for men quoted above are for small stations, so that the difference will be for small stations only. The rate at large stations for men is the same as in London, except that it stops short at 38s. 4d. To find the difference at large Provincial Stations add after age 23, 2s. to the London difference, and at the age 29, 5s. 10d.

Railway E.

Age.	London Stations.			Provincial Stations.		
	Women's Rates.	Men's Rates.	Difference.	Women's Rates.	Men's Rates.	Difference.
	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
16	10 0	10 0		10 0	8 0	2 0*
17	13 0	13 0		13 0	11 0	2 0*
18	16 0	16 0		16 0	14 0	2 0*
19	18 0	19 0	1 0	18 0	17 0	1 0*
20	20 0	22 0	2 0	20 0	20 0	—
21	22 0	25 0	3 0	22 0	23 0	1 0
22	22 0	28 6	6 0	22 0	26 0	4 0
23	22 0	30 0	8 0	22 0	28 0	6 0
24	22 0	30 0	8 0	22 0	28 0	6 0
25 & 26	22 0	32 0	10 0	22 0	30 0	8 0
27 & 28	22 0	34 6	12 6	22 0	32 0	10 0
29 & 30	22 0	36 5	14 5	22 0	34 6	12 6
31	22 0	38 4	16 4	22 0	34 6	12 6

* The difference is to women's advantage.

Railway F.

Age.	Clerical Staff.		Age.	Clerical Staff.	
	Women's Rates.	Men's Rates.		Women's Rates.	Men's Rates.
16	s. 12	s. 12	22	s. 24	s. 30
17	14	16	23	26	32
18	16	20	24	28	34
19	18	24	25	30	36
20	20	26	26	30	38
21	22	28			

Clerical Staff—Women.

A—Clerks, Typists, and Tracers.			B.—Telegraph Clerks and Statistical Staff.		
—	Principal Stations.	Other Stations.	—	Principal Stations.	Other Stations.
Age 16 . .	s. 12	s. 10	Learners . .	s. 6	s. 6
" 17 . .	14	12	" 18 . .	8	8
" 18 . .	16	14	Age 16 . .	12	10
" 19 . .	18	16	" 17 . .	14	12
" 20 . .	20	18			
Maximum .	30	28	Maximum .	30	28
Supervisory posts	40	35	Supervisory posts	40	35

Men's Rates.

Class.	Ticket Collectors.			Parcel Porters and Cloak Room Porters.			Receiving Office Porters.			
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	4th
1st year . .	s. 25	s. 23	s. 21	s. 26	s. 22	s. 20	s. 21	s. 20	s. 19	s. 18
2nd " . .	26	24	22	27	23	21	22	21	20	19
3rd " . .	27	25	23	28	24		23	22	21	20
4th " . .	28	26	24		25		24	23	22	21
5th " . .							25	24		
6th " . .							26			
Maximum .	28	26	24	28	25	21	26	24	22	21

OTHER TRANSPORT

Since the war, women have been increasingly employed as conductors on trams and motor buses in order to replace men who have enlisted. In the majority of cases the women are taken on at the same wage rates per hour as the men, though they work in shorter shifts—generally six hours instead of eight. They are found to be more satisfactory on “single deckers” where the work is less arduous. The work seems to be popular with the women and also with the public. Women are not employed as drivers. In some towns they are employed in washing the cars.

Where women have been employed to drive heavy motor or horse vans they have not proved so successful as on lighter cars, and employers are averse to keeping them. They rarely have the necessary mechanical knowledge to attend to slight readjustments in the van, and the work is generally too heavy. As drivers of lighter cars, however, they have proved very successful and their employment as chauffeuses is likely to increase. Many doctors have taken women to drive their cars. As drivers of taxis on the streets, however, their employment has many objectionable features.

CLERICAL WORK

*Commercial Clerks.*¹—*Summary of Distribution by Industry or Service, Census 1911.*

Industry or Service.	Males.	Females.
Professional Occupations	3,521	1,319
Domestic Offices or Services	471	2,013
Commercial Occupations	56,150	7,584
Conveyance of Men, Goods, and Messages .	14,223	865
Fishing	244	10
Mines and Quarries	17,793	1,167
Metals, Machines	52,564	12,436
Precious Metals, Jewellery	4,449	4,215
Building, etc.	9,764	1,408
Wood, Furniture, etc.	9,456	2,617
Brick, Cement, Pottery, and Glass	4,712	876
Chemicals, Oil, Grease, etc.	17,242	5,116
Skins, Leather, Hair, etc.	3,101	1,163
Paper, Prints, Books, etc.	18,467	8,652
Textile Fabrics	30,406	11,708
Dress	9,864	6,928
Food, Tobacco, Drink	48,387	21,052
Gas, Water, and Electrical Supply	6,312	166
Other General and Undefined	12,145	5,383
Industry or Service not stated	40,458	22,197
Totals	359,729	116,875

¹ Including various other commercial occupations.

In this group the Census figures for 1901 and 1911 show a total increase of 31·3 per cent.—17·1 per cent. increase of males and 109·8 per cent. increase of females. Clerical work is, indeed, one of those occupations which offer a considerable and widening sphere for the employment of women, and since the war there has been a very large addition to women clerical workers, many of whom will undoubtedly be retained. In industry proper, the first displacement of men by women has taken place almost without exception in the office staffs. In the past there has been a distinct tendency to give women the less responsible work, but more experience has shown employers that, with training, the peculiar qualities which women possess make them in many cases equal to or superior to men. In spite of this, in those occupations where the war has been the occasion for the first entry of women, some adjustment has been made in the work in order to reduce the responsibilities of the women to a minimum ; this is notably the case in banks. Where women have been taken on as book-keepers the handling of heavy ledgers has sometimes proved a bar to their further employment.

Large numbers of women have been taken on since the war in Government departments, and by municipal and other local authorities. Generally speaking, women are given little opportunity of advancement or training, and in many businesses their employment is limited to shorthand and typewriting. For various reasons, and largely because of the inferior status of women as workers, they are paid less wages than the men. The Clerks' Union demands the same wages (35s.) for men and women, though it is found in practice impossible to enforce it. Many employers state that women are often paid less wages than the men because they ask for less. A woman who asks for 25s. weekly may be very good or very inefficient. Those, however, who ask for 35s. are in almost every case extremely good workers and well trained, whereas men who ask for 35s. are often indifferent workers.

Evidence with regard to displacement (which is taking place to a considerable extent) is very difficult to collect, save in a very general way, and no attempt can yet be made to systematise it.

BANKING

Women were employed in banks in only exceedingly small numbers before the war. As 20 per cent. of the men in the London

banks enlisted during the first three months of the war, it is to be expected that by now large numbers of women will have invaded this hitherto almost preserved field of employment.

In one bank the proportion of women has advanced from 4 per cent. to 20 per cent. of the whole staff, and taking thirteen representative banks it was found that 336 women had been supplied to them by one agency alone by the beginning of May, and that number has since been greatly increased.

But the vacancies caused by enlistment have not been by any means entirely filled by women ; in the case quoted above from 5 per cent. to 10 per cent. of such vacancies were filled by men. In another, where 600 men enlisted, only 100 women have been substituted.

The women drawn into the banks have been mainly young (from 18 to 25) and of the secondary-school standard of education. At first only the quite young were accepted, but so great was the unemployment among middle-aged (35 years) professional women that an attempt was made to persuade those responsible for the choice of women employees to try them. Where this counsel prevailed better results on the whole were obtained than in the case of the young girls, who frequently failed, perhaps through lack of confidence, in the test set, viz., the balancing of a page of a pass-book. The *personnel*, therefore, of this new army of bank clerks is very varied—from the girl fresh from home or school, through numbers with differing degrees of office experience, to women of training and experience, but in some totally different sphere of work, such as private teaching.

Opinions differ somewhat widely as to the value and efficiency of the work done by women. By one manager the statement was made that as a whole women are more satisfactory than the men they have replaced, it being understood that they replace men only in the more mechanical and routine classes of work ; another held them to be always inferior to men even after considerable training. It would seem to be agreed that generally women are most satisfactory in the simpler branches, doing such things as pass-book calculations, abstracting, and, of course, typing. Here they appear to compare favourably with men, and are often superior to youths. In a few instances more responsible positions have been given them, and with success, but this is not at all general.

Difficulties in employing women in banks have arisen mainly on account of accommodation, but a little arrangement has generally overcome these. Other objections have been put forward with more or less reason, as that women are less reliable owing to more frequent absences on account of illness. There would seem to be some justification for this. Insurance company figures show that between the ages of 21 and 40 women's absences are 15 per cent. as against men's $5\frac{3}{4}$ per cent., though below 21 years there is hardly any difference. Less credible would seem to be the theory that women may not be trusted with confidential matters.

The remuneration for women in banks is generally lower than for men. This seems to be chiefly a matter of custom, but it is also advanced that woman's more frequent illness is in part a reason, also that the supposition that a man has more dependent on his salary, influences the rate of his pay as compared with a woman's. So low have been the salaries offered to women by two well-known banks that employment bureaus have in some cases refused to send them applicants. This is, however, exceptional, and banks have been drawing women from insurance offices by offers of higher wages. Girls of 17 mostly begin at 17s. 6d. a week, rising to 20s.; more experienced women may begin at 25s. or even 35s., but one investigator failed to find one woman earning more than £175 per annum.

Men or women replacing Army recruits are taken on on a temporary basis, the places of men going to the Front being always kept open; but it is expected that a considerable number will not return to their old posts and that women taken on now are likely to remain.

INSURANCE

Women had already been employed in insurance offices to a considerable extent before the war, and were easily substituted for men in many cases of enlistment. One firm's percentage of women rose from 8 per cent. to 10 per cent. of the staff and a further increase is anticipated. Where a permanent staff (pensionable) and a supernumerary staff have existed, women seem only to have belonged to the latter, and the work of men enlisting from the former has been distributed among the men on the latter. Women do mainly routine work, such as typing, shorthand, and simple clerical work; they have been considered less reliable than men

and not able to deal satisfactorily with an influx of heavy work, and so are not found in the more important positions or on the permanent staff. They are mostly of ages ranging from 17 to 40, and of the ordinary standard of school education. They pick up the work as they go along, or are taught by the older workers, and in what they do are found as quick and competent as men.

Women do not seem to have been tried as agents. Where 20,000 agents represent one company there are no women, and it is not intended to try them. But in the district offices of the same company seventy-seven more women have been employed since the beginning of the war.

The payment is on a lower scale for women than for men ; it is estimated at about 15 per cent. less than that of the average man doing similar work. It is contended that women are less keen, and do not increase in value as do the men, also that they are much more uncertain in their attendance owing to inferior health.

Large numbers of women have been added to insurance staffs for National Insurance work. One staff alone includes 2,100 women, as compared with 1,700 men. Difficulty in accommodating women in old offices has been found, but large new buildings have in many cases been put up, and meet this obstacle.

No great eviction of women taken on now is expected after the war.

LOCAL AUTHORITIES

Replacement on a small scale has taken place under local authorities. The following show the figures in the month of February, 1915, compared with July in the previous year :

—	Clerical Staff.	
	Males.	Females.
Employed in July, 1914	25,652	15,549
„ „ February, 1915	24,286	16,144
Increase or Decrease	- 1,366	+ 595
Known to have joined Forces	3,620	
Net replacement	+ 2,254	

The extra women taken on have been almost entirely auxiliary clerks. Their employment is considered as temporary only, and the

scale of pay is sometimes the same, though generally slightly below that of the men displaced. In some cases local authorities are paying to the enlisted men their ordinary pay less Army allowance. In a few towns women are engaged as head office clerks, and in others they are employed as library assistants, in one case as the chief assistant (permanent). One town has employed a woman as a police inspector and another as a sanitary inspector in place of a man.

Women are also employed in some towns as street cleaners ; they work 8 hours instead of 9 hours, and are paid 4½d. per hour instead of 6d.

CIVIL SERVICE

The work of the Civil Service is best considered as clerical work, as, save in the Post Office, the extra women who have been employed since the outbreak of war have in almost all cases been taken on for work of a clerical nature.

It has been impossible to obtain information for all Government Departments, especially those such as the War Office and the Admiralty, in which the work of the war presses most heavily.

Since the war women have replaced men in several Government Departments, but precise information is very difficult to state, for in many of the offices duties have been so re-arranged that the responsible work has been divided amongst the senior members of the permanent staff—or by promotion—and women have been taken on only in the lower grades of the work. The proportion of enlistments, especially amongst the lower grades and in the Post Office, has been heavy—20 per cent. up to the middle of February—and places had up to February been filled by men and women up to four-fifths of those who had left. Much of the work of the higher branches is very technical and requires considerable experience as well as judgment, and it has been difficult in these branches to discover substitutes, with the result that enlistment in them has been discouraged from the beginning. Women are taken on in various ways ; since 9th May the Civil Service Commission has sent women to various Departments ; many Government offices have engaged women privately, from applications received by the Department officials or Ministers concerned or by personal recommendation—others have been engaged through the Labour

Exchanges ; some were women who had qualified by examination ; others have had no experience. It was hoped that sufficient women could be obtained at the Treasury scale, but this has not proved to be the case, and there has been a distinct shortage of capable women willing to enter Government rather than private employment at the rates laid down.

Women clerks have been engaged in practically all Departments. The scale of wages laid down by the Treasury is as follows

For typing, operating duplicating machines and ordinary sorting or routine work, 18s. to 20s. a week, with overtime at the rate of 6d. an hour.

For ordinary clerical work, 21s. to 25s. a week, with overtime at the rate of 7d. an hour.

For shorthand-typing, 26s. a week, with overtime at the rate of 9d. an hour.

For higher clerical and supervising work, 30s. a week, with overtime at the rate of 9d. an hour. In normal circumstances clerical posts at this rate are only sanctioned in a proportion not exceeding one to five of those at the lower rate. The normal hours of attendance are determined by the Heads of Departments at their discretion, and are not less than 42 hours a week. Overtime of less than half an hour on any one day is not counted for the purpose of overtime payment. Ordinary leave on full pay may be allowed (subject to the exigencies of the Service) at the rate of one day for each month of service, as well as on the usual public holidays. Sick leave on full pay may be allowed up to a maximum of six weeks in the year, insurance contributions being payable at the reduced rates prescribed by Section 47 of the National Insurance Act, 1911.

In answer to a question asking for details as to the number, conditions of service, age, etc., of the women employed in Government Departments under this scale, the Secretary to the Treasury replied on 27th July, 1915, as follows—

Appointments to temporary clerkships are usually made by heads of Departments at their discretion, and it would not be possible to ascertain the total number of women so appointed without making detailed inquiries which would take a considerable time, and in view of the constant fluctuation of work would not, I think, be of much value. In view, however, of the large number of temporary appointments authorised to replace junior members

of the public service who were given permission to enlist, a special arrangement was recently made with the Civil Service Commissioners by which they keep a list of suitable candidates and assign them to Departments if requested. This arrangement has been largely (but not exclusively) used by Departments, and the number of appointments so made is as follows :

(1) Typing, duplicating, sorting, and routine work at 18s. to 20s. per week	74
(2) Ordinary clerical work at 21s. to 25s. per week	604
(3) Shorthand typist duties at 26s. per week	43
(4) Higher clerical and supervising work at 30s. per week	56

The average age of persons assigned for routine work on the 18s. to 20s. per week scale is between 17 and 19. Some older candidates with limited qualifications have also been assigned to this grade. No limits have been definitely fixed for this or for any of the other grades.

The duties of the routine grade (1) are those commonly performed by boy clerks, female sorters, and female typists. " Ordinary clerical work " (2) is such as is given to assistant clerks (abstractors) and junior Second Division clerks. The higher grade covers duties of a like character but involving some element of responsibility, *e.g.*, the supervision of work, etc. Besides these grades a few appointments have been made at higher rates for work requiring special qualifications and experience.

All these clerks are informed on assignment that the employment is strictly temporary and liable to termination at any time.

The Board of Agriculture especially has had considerable difficulty in obtaining the required number of women at the wage offered. The India Office has found it necessary to replace four men by five women. Since the beginning of the war the Labour Exchanges have taken on between 800 and 900 extra women in clerical capacities. The War Office has engaged a number of women on new work as " language " experts at 30s. to £3 a week.

An exact comparison of men's and women's wages is difficult, as the men are all on a scale, and it is impossible to assess in real wages such assets as sick leave on full pay, free medical attendance (in the Post Office), pensions, etc., to which Civil Servants are entitled. The duties are often re-arranged, and it must be remembered that, with the exception of doctors, all women in the service are paid at a lower rate than the men.

All the Civil Service Unions urge that temporary work should be paid at a higher rate than permanent, as a safeguard, and that women should receive equal pay for equal work, but the men's Unions wish it to be certain that the work is really equal, otherwise deductions must be made—for favourable duties and hours, etc.

The Postal National Joint Committee asked that women substitutes should be paid the average salary of the man replaced. With regard to postmen, in actual fact women are paid less; if men are not obtainable at the lowest rate, a higher rate can be paid, but women, if taken on, are only paid at the lowest rate. It is very difficult to calculate exactly what the women should be paid as, *e.g.*, twenty women recently replaced twelve postmen. On the average 10 per cent. less appears to be paid to temporary women clerks than to temporary male clerks. The view of the Service is that women should be paid less. The whole question will, however, come up for discussion when the Report of the Civil Service Commission is published.

Departments which have been set up since the commencement of the war, *e.g.*, the Ministry of Munitions, are employing a large number of women clerks, but these are not replacing men, though the proportion of women employed in such Departments is higher than in ordinary Government Departments, as they are organised on more modern lines than the older Departments.

The work of women clerks has been very satisfactory except in so far as the Treasury scale tends to attract inferior rather than superior workers. It is stated that the women engaged since the commencement of the war have on the whole been superior to the men engaged in lower grades during that period.

Extra women are also employed as Post Office sorters, telegraphists, telephonists, and in London to a limited extent as postwomen.

Where women are now doing the work previously done by men, *e.g.*, sorting in the Post Office, the work has been so arranged that women do no night work, no heavy work, and they finish their work in time to reach their homes by public conveyance; where this has not been possible they have been sent home in taxis. Women telephonists employed on night duty are given beds in their rest room so that they can sleep three hours during their night's shift. The lack of adequate accommodation has been to a certain extent

a deterrent to employing women, but such difficulties are not serious and have been gradually overcome. The identity of men's and women's work is often difficult to establish and the information at present at our disposal is not sufficient to allow of our doing this with any adequacy.

Married women have been taken back, particularly in the Post Office, as telegraphists. There is a grievance that these married women are paid only the same as the temporary women and have not gone back to the salary they were receiving before they married, even if they are as efficient as before.

With regard to the higher branches of the Civil Service, as has already been noted, the experience and technical knowledge necessary have not encouraged Departments already understaffed and overworked to attempt experiments in the replacement of men by women save in the lower grades, though in this respect especially the traditions of the Service are wholly against the inclusion of women in such work, and the mere prejudice against the employment of women in the higher posts often biases and distorts judgment. Since the beginning of the war one woman has been taken on in the Civil Service Commission in place of a First Division clerk, and is paid £2 10s. a week. At the Home Office an additional female factory inspector has also been appointed.

In reply to a question asking for information as to how far the places of male inspectors, who had enlisted or been transferred in the Service, had been filled by women, the Home Secretary stated on 28th July, 1915, that "Twenty-four inspectors and six assistants in all have been called up or have joined His Majesty's forces; 22 inspectors and 11 assistants have been lent for war service in other departments, 16 of whom are engaged in special work requiring technical qualifications under the Admiralty and Ministry of Munitions. The present strength is 157, as compared with 219 a year ago. I am considering the question of appointing temporary women inspectors for the period of the war, and one such has already been appointed, but temporary assistance can only be utilised to a limited extent, as a careful training is required before an inspector is able to undertake the full duties of the post, and the work of training and supervision of any considerable number would throw a heavy additional burden on the experienced inspectors and seriously interfere with their own work."

In some places vacant inspectorate places have not been filled either by women or by promotion from the Lower Division. Either course seems equally against Civil Service traditions. All places of men enlisted are to be kept open for them, and as pensions, etc., are owing to them, they will be more likely to return to their posts than other men in private employment. If men are not able to return, quite possibly women will in future be employed to do the work, especially in the lower grades, but the question is bound up with the reorganisation that may come when the Civil Service Commission Report is considered. The Post Office intends to take on wounded soldiers to do messenger and other work, instead of women.

ENGINEERING AND THE METAL TRADES

The metal trades apart from engineering do not appear in Table III owing to the lack of available statistics. The following show, however, the state of employment in this group in February, 1915, compared with July, 1914—

Trade.	Approx. Indus. Pop. Census, 1911.		Net contraction or expansion (per cent.) in Feb., 1915, on nos. employed in July, 1914	
	Males.	Females.	Males.	Females.
Small arms	6,000	¹	- 6.6	+ 4.4
Scientific instruments	27,000	5,000	+ 1.2	+ 8.5
Wire drawing, chain, etc. . . .	45,000	15,000	- 6.6	+ 4.4
Hardware	103,000	23,000	- 14.1	+ 2.7
Musical instruments	28,000	6,000	- 17.6	+ 2.5
Tinplate	23,000	3,000	- 14.2	+ 1.4
Iron and steel	311,000	2,000	- 5.7	+ 0.2
Cutlery, tools, etc.	54,000	17,000	- 9.1	- 5.4
Other metals	104,000	20,000	- 8.8	- 6.5
Jewellery, watch and clock making	44,000	12,000	- 27.9	- 12.8

The most sweeping changes caused by the war demand, have taken place in the various metal industries. It is these trades which have been able to adapt both their plant and their labour to the production of munitions of war. As this adaptation has been going on in very many firms, whose normal products are of the most

¹ The 1911 census shows only 300 women in this trade, but employers' returns showed 1,200 occupied in July, 1914.

varied nature, it is hardly possible to treat the industries in this group separately. Those firms which quickly adapted their products to the needs of the time, soon employed largely increased numbers of both men and women, paying them abnormally high wages, both in the form of increased piece rates and as payment for overtime. Any metal firms, therefore, which were slow in adapting their output to the needs of the country, began in the winter and the early spring to find themselves short of labour, female as well as male. The position then is that a single group of industries, the manufacture of guns and ammunition of various types, has monopolised to an ever-increasing extent the premises, plant, and workpeople previously devoted to all the many metal trades.

Since a large proportion of the munitions now being made does not involve such heavy work as the products of the same factories in time of peace, the proportion of women employed has almost inevitably greatly increased. Many of the processes are such as women have commonly performed in recent years. In some works, moreover, such new plant as has been installed, has been consciously chosen with a view to the employment of women on account of the scarcity of male labour. Most of the newly employed women, therefore, are not engaged upon processes previously performed only by men. The line of division, however, between male and female labour is always variable; and in many works it has moved so as to allow the employment of women on work previously thought to be just beyond their strength or skill. Instances of women being employed in work widely different from any undertaken by them in time of peace, are comparatively rare though they seem likely to multiply rapidly.

It is possible to group the metal trades roughly according to the proportion of female labour employed in time of peace, and to differentiate between the recent developments in each group.

1. *Trades which Deal with Metal in its Rough and Heavier Stages*, viz., Iron Castings, Metal Rolling, Sheet Iron Work, etc. In these trades women are not employed and the war has not altered the position. The processes in many cases are identical with those in time of peace, since the product is turned out in a comparatively early stage, and the fact that it is subsequently used for the manufacture of munitions, only affects these firms by increasing the demand upon them.

2.—*Trades requiring considerable Strength and a High Level of Skill*, viz., Engineering and Motor Building. In these trades the number of women employed in times of peace was very small and some firms are even now not admitting them. The product has, however, largely changed and very many shells are being made in workshops which have been adapted to this form of production, and in departments recently built. Many firms which employed no women before, are now taking them on for the manufacture of shells, and are employing them especially in their new workshops, in some of which the staff is entirely female, with the exception of a few skilled tool-setters.

3.—*Trades requiring somewhat Lower but more Varied degrees of Skill and Strength*, viz., the manufacture of Cycles, Bedsteads, Lamps, Brass Goods, etc. In these trades both men and women were employed before the war, the men usually performing the more skilled and heavier parts of the work. There has, however, been some considerable conflict over some processes, and policy has differed in different works. The line between men's and women's work is perhaps most variable in the cycle trade, on account of the comparatively recent invention of cycles and the rapid development in the methods of their production, making the trade largely independent of tradition. These firms are now adapting their machinery to the manufacture of shells and fuses, and, on account of the shortage of men, the new hands taken on are mainly women. The processes formerly worked alternatively by men and women are being increasingly undertaken by women, who are making their way into many processes previously just beyond the line separating their work from that of the men.

4.—*The Production of Small Metal Goods*, viz., Pens, Buttons, Military Ornaments, etc. These have for many years been trades in which the greater number of the employees were women. A small number of men are employed as tool-setters, but the actual working of the machines or presses is left to women and girls. Therefore, though the output has been altered to meet the war demand for parts of cartridges and military buttons and ornaments, there has been very little alteration in the staff.

Such replacement of men, therefore, as has taken place, has been in firms devoted in time of peace to the industries which are grouped under the headings 2 and 3, though even here women are for the

most part engaged on repetition work and automatic machinery involving little or no departure from the work to which they are ordinarily accustomed. They are employed in filling, capping and cleaning shells, boring and drilling bombs, and making cartridge cases and fuses of all kinds, English and French. For certain of these processes, such as the fine work required in the making of fuses, women are particularly suitable and would probably have been employed even if male labour had been abundant. Where, however, as is the case in several factories, women are executing the entire process of shell-making from start to finish, involving (in the case of 8-inch high explosive shells, and Russian 3-inch shrapnel) twenty-one operations, they are doing work for much of which men would have been employed had they been obtainable. Also, in a few exceptional cases, women are acting as fitters.

The following quotations from the *Engineer* of 20th August show that in some works bold experiments in the wider employment of women have been tried. "During the past few months," says the writer, "a great and far-reaching change has been effected. . . . In a certain factory which is engaged in the production of projectiles in sizes up to those required for 4.5-in. guns, a new department was started some time ago, the workpeople being women, with a few expert men as overseers and teachers. . . . By no means has all of the work been of the repetition type, demanding little or no manipulative ability, but much of it has been of a character which taxed the intelligence of the operators in a high degree. Yet the work turned out has reached a high pitch of excellence. . . . It may safely be said that women can satisfactorily handle very much heavier pieces of metal than had previously been dreamt of. Moreover, they have shown themselves capable of successfully carrying out arduous processes, such as forging, etc., which hitherto have only been performed by men, and of managing machine tools of a very different nature and requiring a very much higher standard of intellect than do automatic and semi-automatic tools. In fact, it can be stated with absolute truth that with the possible exception of the heaviest tools—and their inability to work even these has yet to be established—women have shown themselves perfectly capable of performing operations which hitherto have been exclusively carried out by men."

Besides the replacement of men, there has also been a considerable

replacement of boys by women in some processes. Many comparatively young lads are now engaged upon work of a kind which would certainly, in normal times, be entrusted to adult workmen. Such a process, therefore, as engraving, which would otherwise have been done by boys, is now undertaken by women, who are engraving dials on maxims, numbers on gun parts, and shells, etc. Where a very high degree of accuracy is demanded which can be tested by a purely mechanical operation, girls are often found to work better than boys or men, for the very reason which is thought to make them less valuable in processes requiring judgment.

It is clear that an extension of employment of women in munition work is still possible, since in July last the number employed in this country, much as it had increased, was only between a fifth and a tenth of the number employed in France. The number in England was then, according to Mr. Lloyd George, 50,000 and though it has grown very considerably since, there is still room for expansion. There are in France some women of really high skill in the engineering trade capable of looking after as many as three machines at once. At the same time, the main obstacles to the further employment of women are stated to be very much the same in France as in England. The number employed as fitters is small, and on lathes and automatic machinery they require the supervision of a skilled mechanic to set up the work and prepare the tools. Their disabilities are doubtless due mainly to lack of training, but the proper training of a skilled mechanic is a slow process.

No comprehensive consideration of the question of wages is yet possible in these trades owing to the differences between localities and firms and the rapidly altering situation. It is clear, however, that in many cases the wages of women are decidedly lower than would have been paid to men doing similar work, though usually the work of men and women is not easily comparable.

Girls under 18 years of age are said in some instances to be receiving as little as 9s. per week and those over 21 years 15s. per week for work on which men have formerly received a minimum of 26s. In many places the prevailing rates are 10s. to 15s. for a 48-hour week. In almost all these instances, however, the women are learners and the wage they receive is a learner's wage, whilst the men were skilled workers whose output was considerable. Women are often working overtime, sometimes up to 73 hours per

week, for which they are generally paid at time and a fifth, compared with the men's time and a half, or even double time. In the districts where female labour is becoming scarce, however, a large proportion of the women munition workers are earning 30s. per week and upwards.

There are some firms in which the time rates paid to women, though very much less than those paid to men, compare not unfavourably with them when considered in terms of piece rates. Until women have had a somewhat longer experience even in comparatively unskilled work, they are not likely to be able to work with the rapidity of practised workmen. Nevertheless the rates paid to women are certainly inferior in the majority of cases to those paid to men. The poor pay of women in most occupations in normal times has given them a low standard, and makes them consider the wages which they are now receiving in many munition works as phenomenally large, however unfavourably they may compare with the wages of the men in the same place.

The attention of Mr. Lloyd George has already been called to what is often a glaring disproportion between the wages of men and women in munition works, and he has made certain promises after stating the necessary conditions to be considered in equating men's and women's wages. He insists first of all upon the need for instruction and training. He draws the necessary distinction between piece work and time work rates, though he agrees that during training the women in munition factories under Government control should be guaranteed a living minimum wage. He also states that it has been agreed that as far as the work is concerned, women shall be paid exactly the same price as a man for any piece of work she turns out. "The Government will see that there is no sweated labour." "We cannot give the same time rate, but the piece rate we can give as well as a fixed minimum which will guarantee that we shall not utilise the services of women merely to get cheap labour."

The permanent effects of the war on the main metal trades will not, it is feared, be beneficial. Till recent years the development of machinery and the subdivision of processes which accompanied it have led to the employment of an increasingly large proportion of unskilled and semi-skilled labour. Just before the war, however, there were signs that this process was being reversed, new developments in automatic machinery leading to the unskilled

worker being displaced, while the skilled tool-setter was retained. That is to say, subdivision was still going on, but it was beginning to be subdivision between machines, not between human agents. This recent tendency towards the supervision by one worker of several automatic machines has been checked by shortage of skilled labour since the beginning of the war. In some of the newly built workshops, therefore, instead of the most modern automatic machinery, plant of a type requiring only an inferior degree of skill has been installed.

Appended is a separate Report on the manufacture of Electrical Apparatus and others on certain metal trades less immediately affected by the demand for munitions.

ELECTRICAL APPARATUS

—	1901.			1911.		
	Total.	Men.	Women.	Total.	Men.	Women.
Elect. cable manuf.	—	—	—	5,813	4,858	955
„ lamps . . .	49,518	47,028	2,490	5,627	1,425	4,202
Other electric apparatus and electric fitters .	—	—	—	54,746	50,558	4,118
				66,186	56,841	9,275

(The men's figures for 1901 include also electricians (undefined) who in 1911 = 27,905.)

Women are to some slight extent doing work which before the war was done by men, in certain departments such as :

Small lathe work.

Screw machine.

Cable making.

Winching of transformers for armatures.

This last may be regarded as an extension of work previously done by women rather than as an entirely new process ; for example, where they previously wound one coil on to a transformer they now wind two.

Before the outbreak of war, women were employed in all branches of light electrical apparatus work, but not at all in the electrical supply trade. Although the above displacement is classed as owing

to the war, there is evidence that before August, 1914, the policy of many firms had been to extend the employment of women into new branches. That women have to some extent been replacing men, or at any rate entering new branches, may also be inferred from the fact that, though the electric lamp branch of the trade has been depressed owing to the war, there has been a total increase of nearly 18 per cent. in the employment of women in the electrical trade. Part of this increase is due to a temporary increase of production in branches of the trade in which women were previously employed, but as the enlistment of men from this trade has been on a considerable scale, it is reasonably clear that women are to some extent taking their place during the emergency. In most cases readjustment to meet the introduction of women has been simple, or no alterations at all have been necessary, as they have only been put on to the lighter machine work. One firm has actually made the machines more mechanical and employs an extra mechanic as supervisor.

The introduction of women into new processes often necessitates the provision of another workshop, as in the majority of cases it is not considered desirable for men and women to work together.

The main objections to the employment of women are :

1. Want of technical skill and general experience.
2. Want of physical strength, making it impossible to employ women on the heavier processes.
3. The strong objection on the part of many employers to have men and women working side by side in this trade.
4. In some cases the men's objection to the introduction of women.

In regard to the question of physical strength, one firm employing women in lathe-making, found the women's output slightly less than that of men, owing mainly to exhaustion during the last hour of work. Nevertheless it is clear that as a general rule women's output is considerably less than that of men, since on both time and piece rates their wages are generally 50 per cent. below those of men.

The main advantages are :

1. Their greater dexterity in certain processes where small fingers are an advantage. This has been a considerable factor in the employment of women in such processes as assembly work in the electric lamp trade,

2. The cheapness of their labour.

3. The larger supply of unskilled workers to draw upon.

The Future of the Trade.—In those processes which are suitable to women, the possibilities of extending their employment are great. In the more skilled processes, however, where a longer training is necessary, it depends how far women choose to utilise the present opportunity of becoming highly efficient workers. Hitherto women have been employed almost entirely in unskilled processes, and the trade has been essentially one for young persons, the majority of the girls leaving the trade soon after the age of 19. It is difficult to foretell the state of trade after the war, but in view of the accumulation of private work which cannot be done at present, employers rely on its being good for at least a year or two, and they therefore expect to absorb the men returning from the Front as well as the new women who have been taken on. Two firms stated that after the war it was much more likely to be a case of taking on new men in addition, than of dismissing the new women.

On the whole, there is little definite evidence up to the present of the actual displacement of men by women owing to the war, and the increase in the number of women is mainly due to a temporary increase of production. The Trade Unions, however, state that of recent years there has been an increasing tendency to bring women into the trade, and in view of the fact that the women are unorganised, they are pessimistic with regard to the future, fearing that the increase of female labour will lead to a fall in the standard of wages, and to male unemployment after the war. Much will depend upon the attitude of the women themselves,

THE METAL TRADES LESS IMMEDIATELY AFFECTED BY THE DEMAND FOR MUNITIONS

Although those firms which are still mainly engaged in the manufacture of metal goods other than munitions, are for the most part employing a smaller number of workpeople than before the war, they are only in a few exceptional instances suffering from a restricted demand. For the most part the main difficulty is the shortage of labour, and this is greatly aggravated in those trades which suffered seriously in the first few months of the war, as the workpeople who left them then can frequently not be persuaded to

return. In the trades that are not working on Government orders, many of the employees left to enter munitions and similar work from motives of patriotism, and were in some cases encouraged to do so by patriotic employers. There are several industries working on necessities for the Army, which are nevertheless short-handed, partly because the produce is not quite so urgently required, and therefore the workers are not quite so highly paid as for munitions, and partly because patriotic workpeople feel more satisfied when employed upon "something which explodes."

In those areas where the production of munitions is being actively carried on, there is a decided shortage of women in other trades, which, though less pronounced than the shortage of men, is nevertheless sufficient to prevent much of the substitution of women for men which might otherwise have taken place.

SCIENTIFIC AND OPTICAL INSTRUMENT MAKING

In scientific and optical instrument making, enlistment since February caused a net contraction of employment in the trade, and a demand arose for the labour of both men and women. The percentage increase of women has probably trebled since February. The women have been drawn largely from such trades as jewellery, clock and barometer making, silversmiths, and a variety of less relevant trades such as dressmaking. It is ascertained that in some instances women are actually doing work previously done by men, *e.g.*, the polishing of lenses. The present increase in the employment of women, or more precisely of girls, in the trade, however, is due mainly to the temporary boom, as for instance, in clinical thermometers, test tubes, etc., and to the shortage of boy labour for these trades, and consequently may have little permanent significance. There are further opportunities in certain operations other than repetitive, as, for instance, light mounting of microscopes, etc., in the optical trade. Any considerable revival of the optical trade in England would open up a very large field for the employment of women, who do almost the whole work of this trade in the large American factories. Opinions differ in regard to the employability of women in the various branches, mathematical, scientific, surgical, and optical, of the instrument trade. Much of this work is very highly skilled, and requires a long training, such as women in the past have not usually been prepared to undergo.

JEWELLERY¹

During the first six months of the war there was more unemployment in the more highly skilled branches of the jewellery trade than in any other Birmingham industry. The cheaper branches of the trade, however, in which women were most largely employed, were never as seriously depressed. In September the production of patriotic badges was being carried on more actively than most industries of the town. During the winter there was great improvement in the trade as a whole, but more especially in the less costly and less skilled branches. The demand for inexpensive brooches, bracelets, and other ornaments soon became good, and that for badges worn by men employed on Government work has been for some months very brisk. With the approach of autumn, in which season the trade is normally at its busiest, the demand in most departments has revived very greatly.

There has now been for some months a very decided shortage of both male and female labour. The supply of women is less scanty than that of men, since the men have not only been drawn off to the Army, and other occupations, but were definitely dismissed from jewellery firms through shortness of work in the autumn to a much greater extent than the women. The proportion of women and girls employed is probably higher than it has ever been. We find, indeed, that although the processes which were already performed by women are the most active and are employing large numbers, there are also a good many women doing work of a kind done previously almost entirely by men. They are now, in a considerable number of firms, "making up" the jewellery, that is to say, fitting together the parts, which work was formerly considered for the most part too intricate for them.

It is impossible to forecast the future of a trade which depends upon a luxury demand. If the industry continues to be carried on in Birmingham as extensively as before, there is little doubt that women will retain much of the ground they have gained. Men who desire to return will be reinstated if they have not so hardened their hands by other work as to unfit them for the delicate processes of the jewellery trade, but it is expected that many will be permanently lost to the industry. Since, moreover, the average working

¹ This and the two following Reports relate mainly to conditions in Birmingham and the Midlands.

years of a woman are much longer in this than in most other local industries, a training of some length should be possible for the girls where necessary. On the other hand, the difference of class which made the jewellery trade more attractive than the other metal industries, has largely broken down as a result of the war, and it is believed that many girls as well as men have lost their taste for this occupation. This is, perhaps, not to be regretted until the future prospects of the trade are somewhat more assured.

ELECTRO-PLATE

The electro-plate trade suffered severely from lack of demand in the early months of the war, but now suffers mainly from lack of labour, both male and female.

There are certain processes (soldering, shaping, and polishing) in which women are being employed to a greater extent than before. There would probably, however, have been much more replacement if female labour were more abundant.

HOLLOW WARE

The hollow ware trade is suffering from lack of labour, both male and female. The shortage of men is greater than that of women, and considerably more overtime is being put in by the men, especially by those most highly skilled. Certain processes are now being done by women on machines, which were formerly done by men by hand. The total number of women is, however, decidedly less than before the war, so that if the trade is anywhere near normal when the war is over there should be no unemployment. If there is difficulty in reinstating the men who return, it will be the result of the falling off of Government orders rather than the competition of women.

LEATHER

The Table on the next page shows the distribution of the numbers of men and women employed in the leather trades 1901 to 1911.

The following notes on the trade, which were for the most part drawn up by Miss M. Stettauer, give some picture of the trade and indicate those processes in the different branches in which women were employed (*a*) before the war, (*b*) since.

	Census 1901.			Census 1911.			Per Cent. Increase or Decrease		
	Persons.	Males.	Females.	Persons.	Males.	Females.	P.	M.	F.
Total . . .	79,386	64,987	14,399	83,729	65,891	17,838	+ 5.5	+ 1.3	+ 23.9
Furriers and Skinners . .	9,731	5,876	3,855	14,199	8,526	5,673	+ 45.9	+ 45.1	+ 45.9
Tanners . . .	9,608	9,537	71	10,606	10,569	37	+ 10.4	+ 10.7	- 47
Curriers and Leather goods manuf'rs. . .	29,363	23,620	5,743	16,321 18,215	15,256 10,629	1,065 7,586			
				34,536	25,885	8,651	+ 17.6	+ 9.5	+ 50.8
Saddlers . . .	30,684	25,954	4,730	24,388	20,911	3,477	- 20.5	- 19.4	- 26.5
Boot and Shoe Slippers . . .	218,581 4,348	174,806 2,999	43,775 1,349	202,510 5,260	160,087 3,279	42,423 1,981	- 7.4 + 21.0	- 8.4 + 9.3	- 3.1 + 46.8

A. TANNING AND DRESSING OF LEATHERS

Women are very little employed.

Tanners' and curriers' work is much too heavy and entirely unsuitable for women.

In light leather dressing and finishing, some processes are quite suitable, but it has been mainly a question of prejudice, and if only employers get sufficiently pushed for labour they will resort to female labour. This has already become fairly common in the large provincial towns—before the war even—but in London the factor appears to be almost negligible.

Processes.—Before the war women were to a small extent employed in Dyeing and Blacking.

Since the beginning of the war they have been introduced into—

Seasoning	} Mainly on fancy leathers and small skins
Embossing (Skilled)	
Sorting (Only just starting)	
Measuring	

Women would be suitable also for such processes as washing, oiling, and tacking up. This last process is fairly widely done by women in Nottingham, who are paid 1½d. per dozen for tacking up. (Men in London receive about three times this wage for tacking up.)

Efficiency.—Women's work is said to be satisfactory, slower, but

perhaps on the whole more reliable and regular than that of men. In this branch of the trade, where it is physically possible to introduce women, there is no reason why the efficiency should not become as great, after a fairly short training. (In sorting a good deal of practice and judgment are required.)

Extent of Extra Employment.—In a firm where substitution has taken place to a certain extent—

In June, 1914, 4·86 per cent. of the employees were women.

In June, 1915, 10·68 per cent. of the employees were women.

Or put in a different form—

In June, 1915, there were twice as many women in the firm as in June, 1914.

In June, 1915, there were, of the men, 81·8 per cent. of the number employed in June, 1914.

The total number of employees in this firm at present is 206.

N.B.—All the women introduced into this firm since the commencement of the war are working on leather finishing and dressing, which were previously done entirely by men, but there appear to be few London firms where substitution has taken place to anything like this extent.

Wages.—The introduction of women is not very general, and seems to be confined to comparatively few firms. Where it has occurred, as a rule a lower rate is paid. The following reasons are given—

(a) Women have their limitations, *i.e.*, in the employment of male labour men can be selected for more valuable positions and for duties which women could not perform, *i.e.*, men are regarded as a more permanent asset to the firm.

(b) They do less work. (Even the piece rate appears to be lower, however.)

(c) They do not require, expect, or ask for 'so much money.

Objections put forward by Employers.—(1) A large proportion of leather tanning and dressing is unsuitable work for women.

(2) Difficulty in finding town girls who have the physique for the rougher kind of work which (even in the lighter branches) requires a certain amount of hard manual labour.

(3) Lack of accommodation.

(4) Difficulties in working overtime, permission being granted only when working on war contracts,

Objections from the Men.—The objection of men seems to be a serious point, and various opinions are put forward :

(a) Some employers say they cannot risk friction with the men now owing to the impossibility of replacing them.

(b) Others say that the present would be a good time for introducing women, as there is likely to be less objection than in normal times. Once women were admitted the difficulties after the war would not be so great.

(c) The opinion is also expressed that there is not yet sufficient shortage of male labour, employers put off the introduction of women as long as possible, and the men will keep up the objections until the time comes when one process is actually held up for want of labour in the preceding process.

(d) Objection to mixing male and female labour in the same factory.

Previous Employment.—So far, of the women introduced most were not in the leather trade before, about half were from various trades, some were not previously in industry, a few were from domestic service. The majority of the women were aged from 18 to 30.

Question of Permanence.—In this branch of the leather trade those few firms that have introduced female labour since the commencement of the war are inclined to think that the employment will be permanent.

The following opinions are given :

(1) Although the men who have joined the Forces will be re-engaged after the war, it does not follow that they will in every case be employed on the same work, *i.e.*, the women may not be pushed out of their present jobs, and possibly the present indifferent workers, both male and female, will be dismissed, and thus room made for both the good female workers at present employed and the men returning.

(2) If women once get installed in this branch of the trade it may be an economy to keep them after the war (even if it is not now, owing to the comparatively high wages they can at present command).

(3) The percentage of men returning will, in all probability, be small.

(4) The slump in the trade may not be as great as is generally expected, especially not in this branch, on which the boot trade

depends. As many firms are exclusively working for the Government, the reserve stock of boots and shoes is gradually being depleted, and will be very low at the end of the war, and will need replenishing as soon as possible, *i.e.*, there may be more work available than is expected, and therefore perhaps no real reason why there should not be some permanent scope for women, once they get into the trade.

(5) There should be plenty of work available for men and women, too, after the war, if only cheap German goods were excluded by tariff.

Some firms in the heavy branches are experiencing a severe shortage of labour, and would be only too glad if women were physically capable of doing the work, *e.g.*, one firm has lost 30 per cent. of its men. Tanning and currying are heavy, dirty work, and the men have gone, not only owing to enlistment, but also owing to the increased volume of employment available, which tempts them to leave dirty work if they can find clean. An isolated firm or two in the provinces have put women into the tanneries, but it is only a particularly rough class of women who would do this work, and it is quite impracticable on a large scale.

B. BOOT AND SHOE TRADE

Women have been largely employed for years, in certain parts of the work, but there has been very little substitution owing to the war. Women labour for the most part, both now and before the war, is to be found in London.

Processes—Before the War.—The main province for women's work is the entire making of the upper after it has been cut out, *i.e.*, machining, skiving, fitting, closing, lining, eyelet machining, etc. Also inking and colouring. In one firm women have done machine clicking for years, but this is very exceptional.

Processes—Since the War.—In some firms women have for the first time been put on to such processes as—

- Cutting heels,
- ¹ Cutting out and sorting socks,
- ¹ Putting in lasts,
- Sand-papering soles,
- ¹ Lacing uppers with string,
- Clamping on heels,
- Riveting the in-soles,

¹ These jobs were in some cases formerly done by boys

but these are mainly preparatory or subsidiary processes, and the main processes in the making of the shoe (excepting the uppers, see above), namely clicking, making the soles, lasting, and finishing remain exclusively the work of men, and there is no immediate prospect of any change.

There is some scope for women in a few processes, which are new and only in demand for the period of the war, *i.e.*, making, nailing, and quilting half-soles ready to be sent to the Front, special repairs to heels, etc. Here, women were put on to the work as soon as the machines were installed, and there was no question of men being put on to the work, which is very easily and quickly learnt.

Efficiency.—In the few processes where women have replaced men or boys, in some cases the efficiency appeared to be as great, and in fact women were found to be earning more on the same piece rate than men on the same job, as they “stuck to it more.” On the other hand, in some cases they were said to be slower, though steadier and more regular.

N.B.—The slowness was most complained of where the experiment of girls’ work was newest. The woman could fully hold her own in the work, where she had been in the trade before the war on a different process, so that the probability is that increased experience would approximately equalise the efficiency, but of course none of the processes enumerated above are at all highly skilled.

Extent of Extra Employment.—On the whole the extent of substitution is probably very small—in one large firm the substitution amounted approximately to 3 per cent., although about 10 to 12 per cent. of the staff consisted of women doing new and temporary processes. Many firms have had no change at all.

Wages.—The whole thing is on so small a scale that it is difficult to get much definite information. In one case the women were being paid at the same rate as the men, in another it was said that the women were still “being trained” and no definite rate had been fixed.

Previous Employment.—The majority of women who have come into the trade (either to new processes, or to processes formerly performed by men) were not previously in the trade, but were engaged in serving in shops, domestic service, tea-packing, and one was from an asbestos factory. This last was put to cutting heels, as her former experience in cutting up material was found to be helpful

for the new work. In one firm the small number of women who were to take on men's jobs were selected from women already in the firm working on "uppers" before the war. In some cases girls have been taken straight from school to replace boys who have either left or been put on to more skilled work.

Training.—The new processes have been taught to the women in the factory, but they are simple, and in general an average girl can reach her maximum in one to two weeks, *e.g.*, one girl nailing half-soles came into the trade, having formerly served in a sweet shop (and earned 12s. weekly) and at the end of one week was earning £2. She has been earning at this rate for several months. This girl was not exceptional.

Where women have been actually substituted for men or boys the work is in no case highly skilled, and is such that it can be learned in the factory without detriment to material.

Question of Permanence.—As far as the replacement of men by women is concerned, the question of the men returning is hardly a practical one as the percentage replaced is so small. Women who have been introduced for new "war" processes, will, of course, have to go, but as a whole their "market value" will probably be considerably increased and therefore their ability to "hold their own," as they will have learnt to work to time and to "speed up," which, coming from purely time work jobs, such as domestic service, and shop service, they would not have been able to do before.

Reasons why there has been little Substitution and comparatively little Alteration in the Demand for Female Labour in the Boot and Shoe Trade.—(1) The increased demand for boots since the outbreak of war has been for heavy army boots, and these are almost entirely made by men.

(a) Because the machining on Army boots is heavy, and is not generally done by women, though except for the actual weight of the work, there is no real reason why it should not be done by them.

(b) Because even where it is, or if it were done by women, the actual amount of machining to be done on the boot is very much less than on the ordinary light boot, as there are fewer seams, *i.e.*, the scope for what is normally the women's branch of the work is smaller.

(2) In the light boot trade, there has been practically no entry of women into men's work for two main reasons—

(a) The organised and very emphatic resistance of the men.

(b) The work is very skilled and requires long training. Parts of it, notably lasting and finishing, are much too heavy and laborious.

War Emergency Conditions of Employment of Female Labour in Substitution of Male Labour.—At a Conference of Representatives of the Manufacturers' Federation and the Operatives' Union, held at the invitation and under the Presidency of Sir G. R. Askwith, K.C.B., K.C., Chief Industrial Commissioner of the Board of Trade, on 3rd June, 1915, to consider the situation that had arisen in the boot and shoe manufacturing industry consequent upon the serious depletion of male labour through enlistment, it was mutually agreed as follows—

1. That females may reasonably be employed upon certain operations hitherto ordinarily restricted to male labour.

2. That the employment of females shall be limited to such operations as they are physically fit to perform.

3. That females so employed shall be paid the same rates of wages as are now paid to males for an equivalent quantity of work.

4. That due regard shall be paid to the desirability, where possible, of separate working conditions where male and female operatives are employed in the same department.

5. That no female shall be employed in substitution of male labour without previous consultation with the local Trade Union officials, and in the event of disagreement the question shall be referred to the Standing Committee of the National Conference for settlement.

6. It is understood that female operatives shall only be engaged in substitution of male labour where and for so long as it is not found possible to obtain male operatives.

7. That this agreement is an emergency provision and shall have effect only during the continuance of the present war.

It has been difficult to obtain adequate information with regard to wages, the Trade Unions themselves furnishing little besides general complaints, which though perhaps capable of substantiation yet lack so far the necessary definite evidence.

LEATHER GOODS MANUFACTURE

Trunks, bags, and general leather goods, including (now) military equipment, harness, etc.

(I) LONDON

It is in this branch of the leather trade that the great increase in the employment of women is to be found, mainly in the military work, but here again, the actual substitution that has taken place is practically nil. The increase is due simply to the enormous increase in the amount of work to be done and consequently in the demand for labour.

Processes.—Before the war women were employed on the following processes: machining and stitching, (*i.e.*, including welting on bags); lining, stiffening (on bags); some strapping (*i.e.*, stitching in buckles and inserting locks); closing (*i.e.*, on attaché cases).

Since the war, women have to a small extent been introduced into riveting, and are doing a few subsidiary processes such as were done by men before the war, *e.g.*, punching holes in haversacks, also riveting bandoliers, but on too small a scale to have any practical effect on the trade.

The main feature of women's work in the trade is, however, the huge influx of women into it on processes which have for years been largely regarded as "women's" branch of the work. Thus on the present work there is no question of substitution or replacement though there may be indirect effects afterwards.

Efficiency.—As far as substitution is concerned the efficiency of women seems lower, *e.g.*, riveting is probably the lightest of the processes hitherto regarded as men's work, but even here, women do not seem to have the same grip over the tools; in one large firm it is reckoned that a man will probably make almost twice as much as a woman, on the same piece rate at this work, and it is unlikely that experience will remove the inferiority to any great extent. In another case an experiment in teaching riveting to women was being made, but the work was found a little hard physically, though not impossible.

It seems clear that the extension of women's work has been in those processes which were women's before, *i.e.*, machining and hand stitching, and here—in the case of women entering the trade since the commencement of the war—it is found that in the average

woman or girl the efficiency becomes moderately good after four to five weeks' training. (See note on training.)

Extent of Extra Employment.—The "substitution" numbers are exceedingly small—in one large firm employed on Government work, the percentage of women employed on men's work is about $2\frac{1}{2}$ per cent., but there are five times as many women employed in women's "normal" processes as last year, and about 4.5 per cent. as many men. Total number of employees in this firm is now 2,800. In another firm (total number of employees now 620) also engaged on military work, the number of employees is nearly double what it was last year. The increase is made up in about the following rates: 92 per cent. of the increase is in women and the rest men. Here, however, there is a serious shortage of male labour, and an attempt is being made to train women in riveting. In yet another firm the increase in labour since last year (owing to military work) is 30 per cent. more men, 200 per cent. more women.

On the whole, numbers are misleading in this branch, as in hardly any case have firms been able to keep their civil and military work separate, *i.e.*, in some large firms all the private work has ceased, and therefore not only are the new "entries" into the trade engaged on military work, but those who were already in the firm before have been turned on to it as well. On the other hand, some are doing contracts for the Government intermittently, *e.g.*, one firm (not one of those quoted above) reckons that on its normal work (trunks) 15 per cent. of the staff consists of women, working mainly on lining. When the war contracts come in, these women are not disturbed or displaced, but a large extra staff of women stitchers and machinists is engaged for the period of the contract. How the women are employed between the contracts, the firm cannot say; they probably drift into other temporary work.

Previous Employment.—A large proportion of the girls who have entered the trade are from other industries, *e.g.*, jam and biscuit factories, having no previous experience of leather work, but some firms have selected the girls with reference to their previous employment—*i.e.*, showing preference to those who could machine well before. There have been very good results, however, in the case of those who had no previous experience of a similar trade.

Training.—Where women are being introduced into stitching and machining, it is, as a rule, necessary to teach them in a separate

department in order that they may practise on cheap material. This is done in some of the large firms both for stitching and, to a small extent, for riveting. The women become proficient in stitching in about five weeks. One firm has trained nearly 1,000 women in stitching since the commencement of the war, paying them 2d. an hour while they learn.

There is very little unskilled work to be done, though the training schemes are quite a temporary measure during the war.

Question of Permanence.—Here again the substitution is on so small a scale that it will not affect the men returning. The work is, for the present, regarded as of a more or less temporary nature, perhaps because (e.g., in riveting) women have not yet had much experience, or it is too early for employers to say whether they consider the work so inferior as to be merely a "make-shift" during the present shortage, or whether there is any permanent scope for it.

The question of the women stitchers, etc., who have been attracted into the trade since the war is, of course, much more serious, and there is a serious possibility of there being no scope for them when the Government contracts are over and many will have to leave the trade. Some employers regard the whole thing as a purely temporary inflation of the demand for women in the trade, and consider that after the war, not only will the war entrants into the trade have to go, but a considerable time will elapse before private connections are re-established. In the meantime there may be a slump which will involve even a dismissal of a proportion of the pre-war staff. However this view is not universal, and it is possible that other counteracting factors may enter into consideration, tending to increase the scope for women's work in this branch after the war. It would depend on the state of foreign trade, and on many other far-reaching considerations which it is impossible to foresee.

Reasons for very Limited Substitution.—(1) Most articles require stitching or machining, and this has been for some years past women's work, *i.e.*, in a large proportion of the firms here dealt with, women had been introduced long before the war. The initial prejudice having therefore been overcome employment of women had in most cases been "pushed" up to the limit, that limit depending largely only on physical ability—where women had never been

before employed, it was as a rule because the whole article was too heavy.

(2) There would be considerable scope for the employment of women in the trunk trade, but there is great resistance to this from the men, who are independent at present, as they know they cannot be replaced. If there were a still greater shortage of labour than there now is they might consent to it, as they might be "held up" in some processes through lack of labour in others.

(3) Most of the men's work, especially in bags and portmanteaux, is highly skilled, and mainly constructive, *i.e.*, can be handled only after long experience. If girls were apprenticed to the trade in the same way as boys there is a possibility that they might ultimately become skilled workers in the men's jobs, though they would have to be carefully selected for strength and physique, as the majority of the work is undoubtedly too heavy for the average woman. However, as long experience and training would be required there could be no question of substitution in connection with a "war" scarcity of labour. Employers state that from a business point of view it would pay them better to refuse orders than to undertake such training schemes for a temporary purpose.

Variation and Shifting of the Demand for Labour in Different Branches of the Leather Trade.—The increased demand for labour in the leather trade since the war has, of course, been in those branches that are working on war contracts, *i.e.*, initially there would be an increase of labour required in the tanning and dressing of heavy leather. Here (as already stated), there is no scope for women at all, and it is fair to say that, however great the shortage of labour might become, the place of men could never be filled by women in this branch.

In the boot trade, the great increase in the demand has been for heavy Army boots, and here, again, the demand can only be supplied by women's work to a very small extent. On the other hand, in those firms where the bulk of the work is at present Army orders, the amount of work available for women would tend to decrease (owing to the large extent to which the Army boot is made by men). In any case, there has been a very considerable tendency for women to leave the light boot trade and to go into the military equipment work. Women's wages in the boot trade are not particularly good, and the present high wages to be obtained

at equipment work are a great attraction. Skilled women from the boot trade would, of course, be more readily taken on for military work than women coming into the trade for the first time. This tendency has been much greater than the possible temporary decrease of employment available for women in certain firms would account for. In fact, there is considered to be scope for introducing fresh women to the boot upper trade, and at least one scheme is working at the Cordwainers' College, London, for training women in fitting and closing, etc. These women are taken mainly from the bookbinding trade, in which there is at present a certain lack of employment, and the scheme is found to be very successful, the women being easily placed when trained.

In the general manufacture of leather goods, there has been a tendency for women to shift from those firms where work was slack to those engaged on Army work, *i.e.*, at the present time this would mean roughly a shifting from small to large firms, as there do not appear to be many large firms not engaged on Army orders.

To sum up, the greatest demand for women's work in the leather trade is in the military equipment branch. It is supplied :

- (a) To a certain extent from other firms that are slack, in the trade.
- (b) To a certain extent from the light boot trade.
- (c) Largely from outside.

(II) BIRMINGHAM

Apart from the actual production of munitions, the leather goods trade has benefited from the war to a much greater extent than any other. There is some increase even in the male labour employed. The number leaving to enlist has been small, largely because the proportion of men of military age employed in this trade has for long been less than in most others. This is due to the fact that the output of saddles and other heavier goods, the only branch of the industry in which men are largely employed, has been small since the close of the South African War, and, therefore, very few young men have entered the trade.

The employment of women in the leather trade has increased to a very much greater extent than that of men. The large proportion of women, however, is not mainly the result of the substitution of female for male labour in definite processes. For years, with the

introduction of lighter machinery and greater division of labour, an increasing proportion of leather work has been performed by women. This movement has been accelerated by the war, and especially by the introduction of new machines, worked by women, to perform processes which men previously did by hand. Even now, however, the proportion of work done by men is considerably larger than the respective numbers of men and women employed would suggest, as, owing to the shortage of skilled labour, more overtime is being worked by the men than by the women. Although the processes performed by women in the leather trade are not of the highest order of skill, judged by the standards of male labour, yet they take some time to learn. The learning period is decidedly costly to the firm on account of the material damaged by inexperienced hands. Early in the autumn one large firm showed considerable foresight in transferring a hundred girls from the manufacture of golf balls to the leather-stitching department; the immediate loss to the firm was about £100, but the advantage since has been great. During the course of the winter an increasing number of girls has been drawn from other work to the leather trade, and though it is estimated to take about a year for girls to become fully proficient, many of them are already earning comparatively high wages.

As a precautionary measure one firm is training a few girls in the heavier cutting processes, so that they may be able to take the places of men, if more of these leave the trade. Training schools have also been established in London and elsewhere.

There is unfortunately little doubt that there will be a great deal of unemployment in this trade at the close of the war; this will be due, not mainly to competition between men and women, but to the great diminution in the demand for leather goods. Such a period of slackness of trade and considerable unemployment in the leather industry followed the South African War. It is to be feared that the greater output during this war may make the subsequent restriction of business even more serious.

TAILORING TRADE

The following shows the increase of employment in the tailoring trade over the ten years, 1901 to 1911:

Census 1901.			Census 1911.			Increase or decrease %.		
Females.	Males.	Total.	Females.	Males.	Total.	Females.	Males.	Total.
117,640	119,545	237,185	127,115	122,352	249,467	+ 8·1	+ 2·3	+ 5·2

Tailoring is a term applied to the making up of various qualities and kinds of outer garments—male and female—ranging from best bespoke work, *e.g.*, men's Court and dress suits, to Kaffir clothing which is shipped mainly to South Africa, and cheap dungarees such as workmen's overalls. The trade now employs about 143,000 women, and since the war this number has been increased by about 20,000, while the total number of men employed has decreased by almost 10 per cent. In no other trade save munitions has the increased employment of women been more marked since the war. It is impossible, however, to speak in terms of the trade as a whole, and it is necessary to distinguish its various branches in order to appreciate the nature of the increase of women's employment. The trade may perhaps be conveniently classified into the following branches :

Men's Retail Bespoke ranges from Court and dress suits to high-class suits made to measure. This part of the trade employs almost entirely skilled male labour. In the very best work the suit is made practically throughout, mostly by hand, by one person—the individual system. Most of the work is, however, done on the sectional system (subdivision of labour—cutting, basting, machining, pressing, and finishing). The war affected this part of the trade first, and it has never recovered from the depression, save temporarily for a few weeks during the height of the Spring season, whilst orders for officers' uniforms have partially counterbalanced the loss of civilian trade. The men who have left the tailoring trade almost all belonged to this branch.

Ladies' Bespoke.—Much of what applies to men's bespoke work applies also to this branch, though generally speaking the work is lighter. It is for the most part a man's trade and like men's retail bespoke work needs considerable experience and skill. The war has caused considerable depression.

Ready Made and Wholesale Bespoke.—Ready-made work is cheap

work done to stock sizes and supplied to retail shops or to merchants abroad. Wholesale bespoke consists of either "ready-made altered to fit" or of orders for a comparatively cheap class of work, for which individual measurements are taken and passed on to the factory or workshop by retail shops or "tally-men" who obtain orders from door to door in working-class neighbourhoods. In this work the cost of production is very much lower than in the retail bespoke branch of the trade, and depends to a large extent upon the use of machinery and power, and a highly evolved sub-divisional system. The work employs, at any rate in the factories, a large proportion of female labour (about 85 per cent.). The work is done either in factories or in small workshops (mostly Jewish), working almost always as sub-contractors to factories or wholesale agents. The chief centres of this branch of the trade are London, Leeds, Norwich, Manchester, and Bristol. There is a larger proportion of small workshops in London than in the North of England, and provincial centres of the trade, such as Norwich, employ a greater proportion of female labour. This is owing probably to the fewer alternative avenues for women's employment to be found in these districts. London is the centre in which the small master or sub-contractor with his workshop flourishes, and he has played a large part in the making up of khaki clothing. He is generally a Jew, and normally does the lower class of retail bespoke and the better class of wholesale bespoke work, and though he employs in proportion less female labour than the factories, he is able, owing to the skill and speed of his workmen and the way in which he organises and subdivides his work, to compete successfully with the factory except in the cheaper grades of work.

Medium and Juvenile Tailoring.—This branch of the trade consists of the making of cheap grades of trousers and waistcoats, which comprise almost a separate branch of the trade, and boys' and children's outer garments. It is a slightly lower grade of work than the wholesale bespoke and employs almost entirely women and girls.

Export Work or Shipping or Slop Trade.—This branch of the trade consists of exceedingly cheap ready-made garments exported to be sold to natives in South Africa and elsewhere. It also includes dungarees, such as workmen's overalls, and drills such as surgeons' coats, and cheap cotton clothing, most of which is exported. It

is mainly women who are employed in the making of these goods.

The above divisions are not clear-cut, and the lower the grade in the trade, the more difficult does it become to differentiate labour or process. It will be noticed that, generally speaking, the higher-grade work employs a greater proportion of men than the lower grade and depends less upon machinery and more upon skill and experience.

During August, 1914, a general depression set in throughout the tailoring trade, which showed itself most in those parts of the trade dependent upon private orders, *e.g.*, the retail bespoke and to a certain extent the wholesale bespoke trades. Shipping orders (the lower-class trade) also began to fall off, not only because of a slackening in demand and temporary difficulties common to exporters with regard to credit, but because of the shortage of shipping. Owing to Government measures the balance of trade soon readjusted itself and the demand for clothing from merchants abroad increased. This was due to good prospects of the harvest in South Africa, and to the cessation of Austrian and German competition, but the shortage of shipping nevertheless remained a factor which prevented the export of goods in their normal quantities.

The wholesale bespoke ready-made and medium branches of the trade were probably less affected by the depression than the other branches, though even here a considerable contraction of trade occurred. During September and October, however, War Office and Territorial orders had the effect of more than restoring this part of the trade to its normal proportions. Khaki became the decisive factor affecting not only the large factories but also the sub-contracting workshops, for with the enormous increase of Government orders restrictions, such as those affecting sub-contracting, were relaxed. In normal times the military tunic and great-coat can be made up only by experienced and special labour. Owing to a certain extent to the dislocation of the trade and the shortage of cloth, but in a greater measure to the fact that few manufacturers were sufficiently experienced to make up military clothing, khaki uniforms during the first months of the war were not being turned out in the quantities required by the War Office. *The design of the military uniform was therefore simplified.* This at once (October) made it possible for many firms whose experience was limited to civilian work to undertake the new military pattern, and within a few weeks

the orders for khaki clothing were spread throughout the trade.

Those branches which were best equipped, by reason of the nature of their previous civilian work, their machinery and the division of their labour, to manufacture khaki clothing for the new armies were the wholesale bespoke, ready-made, and medium branches. To a certain extent the slop and shipping branches of the trade were pressed into making the new clothing, though they were better fitted for, and chiefly engaged in making up lighter goods: belts, shirts, kit-bags, mess-tin covers, canvas bandoliers, haversacks, nosebags, bedding, etc., for Army requirements. The retail bespoke branch was unable economically to produce the new Government clothing even at the comparatively high flat rates which were given. Consequently men from the retail bespoke trade entered the wholesale bespoke and ready-made trades as skilled hands, *e.g.*, viewers and foremen, and in those parts of the work requiring physical strength, such as pressing.

The military demand was for clothing that could most economically be made up by power machinery in the factories, and in small workshops where a highly evolved sub-divisional system made it possible to compete with the factories. The great revival in the trade was only a revival in that part *which normally employs, outside the cutting rooms, a preponderance of female labour.*

The great increase in women's employment in this trade and the considerable decrease of men's employment which accompanied it, should not be interpreted as showing that women have displaced men in the sense that women are now doing processes previously done by men. Men's employment has been naturally restricted, owing to a diminution of orders in that part of the trade in which men's labour predominated, *i.e.*, the retail bespoke trade. Women's employment has enormously increased owing to an unprecedented demand on that part of the trade in which women normally predominate, *i.e.*, the wholesale bespoke and ready-made branches. The nature of the problem may perhaps be made clearer by a reference to the actual processes involved in making up military uniforms.

The cloth is obtained in rolls, and has first to be cut into pattern. This is done by men working a band-knife machine. The pieces of cloth are laid one upon another, 24 to 30 deep, and are then cut by

the machine. The work is heavy, entails much stretching and strain, and requires considerable skill. A false movement of the cloth may "spoil" dozens of suits and mean considerable financial loss. Various rumours and a few instances of women employed as band-knife cutters have occurred, but so far women have displaced men only in the operation of the "laying out" and "rolling up" of the cloth. An exceptionally strong woman might undertake band-knife cutting, but in almost every case the work is unsuitable for women. Women, however, do *cutting* on lighter cloths and in smaller quantities in the ladies' tailoring part of the trade, though even here it is exceptional. The Trade Unions concerned strongly oppose the introduction of women into the cutting-rooms, even where laying out and rolling up, normally done by boys, are the only processes done by them. They have agreed, however, that women shall be engaged on these processes, for the duration of the war. Women themselves do not seem desirous of undertaking the work.

Fixing and Basting, i.e., placing the pieces in their places ready for the machinist. This is skilled work, and though it is usually done by men, there seems no reason why it should not be undertaken by trained women. Basting is often done by women.

Machining, by power or treadle machines, employs more workers than any other process. Save on very heavy work, *e.g.*, overcoats, the process is done by women. In small workshops, more women machinists have been employed since the commencement of the war.

Finishing, i.e., cleaning or taking out cotton tacks and cutting off cotton ends; button-holing by machine, buttoning by machine or hand, and "felling in" pockets, linings, etc., is entirely women's work, and is worse paid than any other process. There is a felling machine on the market, and though it is likely to have an enormous influence later on this branch of women's work, which is partly done by home workers, it has apparently not yet been brought sufficiently to the notice of the trade. The machine costs about £70, but owing to the present low rates paid to women finishers, the incentive to install this machine does not appear to be strong.

Pressing consists of the under pressing of seams, and pressing-off the whole garment. The seam pressing, which is lighter work than

the pressing-off, is done by women. On cheap goods a machine press—the Hoffman—is used by a few firms. This press was recently introduced from America, and is worked by women. It has probably displaced some men, but is not used to any great extent. Other mechanical presses are also used, but none to any appreciable degree.

To meet the seasonal fluctuations of demand in the tailoring trade, the factories depend upon the smaller employers or sub-contractors, and these sub-contractors depend upon other sub-contractors and home workers to assist them in time of excessive activity. There are always a considerable number of small employers and home workers on the fringe of the trade with whom work is placed to be made up during periods when trade is exceptionally brisk. It is difficult to say how large this reserve of labour is, but in London it is a very elastic factor. It consists of people employed in various allied dress trades such as shirt- and dress-making; of married women who wish to supplement the casual earnings of their husbands, and casual home workers; and of small "slop" tailors who undertake better-class work when they can get it. As army clothing orders filtered through the tailoring trade, this reserve of labour was quickly absorbed. Employment amongst unskilled workers was exceptionally good, and few women were drawn from this source. But many ladies' tailors, dress- and blouse-makers, as well as charwomen, cigar and cigarette makers, box-makers, shorthand typists and foreign correspondents, book and envelope folders, babies' and women's boot and shoe makers, umbrella makers, and workers in luxury trades generally, were attracted to the trade. Any woman who was able to manage a machine could obtain employment. The output was increased by extra overtime, the Home Office allowing the relaxation of factory legislation on application by particular firms. To meet the demand, new factories and workshops for the manufacture of khaki clothing were started, and other workshops were converted for the purpose of making the necessary clothing for the Army. Premises engaged in making underclothing, ladies' mantles and costumes, as well as ordinary tailoring workshops, were immediately adapted for the purpose. In one instance, a walking-stick manufacturer suddenly gave up his trade, and a week afterwards was employing a dozen people in making khaki clothing. In another case, a refreshment contractor

for weddings gave up his ordinary business and converted his premises into a khaki clothing factory.

By the middle of February the New Armies had been clothed, and contracts were cut down by about 50 per cent. The clause prohibiting sub-contracting was reinserted into War Office (but not Territorial) agreements, and those small sub-contracting workshops which were not taken over by the contractors, were soon busy on overdue civilian and shipping orders.

The War Office has decided shortly to return to the original pattern of Army clothing and this will mean a reduction in the number of those firms able to undertake the work. Merchants' stocks of civilian work are, however, depleted, and the shipping trade is brisk, so that the diminution of Government orders or their concentration in fewer firms will probably not cause for some months any appreciable increase of unemployment in the trade. Workers in dress who were absorbed by the tailoring trade will probably still find a demand for their labour in other branches of the clothing trade.

To sum up :

(1) Compared with other trades, the tailoring trade shows a very considerable increase of women's employment, probably an increase of 20,000 or 14 per cent., owing to the placing of Government orders for military clothing.

(2) This increase has occurred in the ready-made, wholesale, bespoke and medium branches of the trade in processes such as machining and finishing, which are normally women's work. There has been no appreciable displacement of men by women save in minor operations, *e.g.*, "laying out" and "rolling up" in the cutting rooms.

(3) Before the war the limit to which women could be employed in tailoring was practically reached. Men's processes are either too heavy or require more training than the majority of women are prepared to give.

(4) Military tailoring is normally a special branch of the trade. The simplification of the design of military clothing made it possible, however, for firms normally doing only civilian work to undertake the manufacture of khaki clothing. Further facilities were afforded by the relaxation of the clause in agreements prohibiting sub-contracting.

(5) The War Office clothing requirements have now been met, and clothing contracts have been considerably reduced in consequence. Sub-contracting has been prohibited and it is stated that the original design of the clothing will shortly be revived. This will result in a decrease in the volume of women's employment.

(6) The future of women's employment in the tailoring trade will be affected by the further introduction of machinery. Since the outbreak of war, small workshops have introduced machinery and power to an unprecedented degree. The use of the Hoffman press, which is worked by women, has displaced men hand-pressers to a limited extent. A felling machine, which would displace women finishers, is on the market, but it has not yet been taken up to any extent by the trade.

CHEMICALS

	1901 Census.			1911 Census.			% Increase or Decrease.		
	Per-sons.	Males.	Fe-males.	Per-sons.	Males.	Fe-males.	Per-sons.	Males.	Fe-males.
Total Workers	88,635	66,068	22,567	131,844	98,598	33,246	+ 48.7	+ 49.2	+ 47.3
Explosives and Cartridges .	10,969	6,697	4,272	9,279	5,256	4,023	—	—	—
Chemicals and Alkali . .	27,220	23,293	3,927	40,562	33,473	7,089	+ 49.1	+ 43.7	+ 80.5
Oil, Grease, Soap, Colours, Dyes, etc. .	26,516	21,662	4,854	43,465	35,737	7,728	+ 34.7	+ 60.5	+ 59.3
Lucifer Matches .	2,406	541	1,865	2,700	743	1,957	+ 12.2	+ 37.0	+ 5.0

The following figures show the increase or decrease of employment in the trade from the outbreak of war to the middle of February :

Chemical Trades.	Net expansion or contraction % in Feb., 1915, of numbers employed in July, 1914.	
	Males.	Females.
Heavy Chemicals	+ 11.0	+ 5.2
Chemicals for Textile Trades, etc.	+ 14.1	+ 18.6
Drugs and Fine Chemicals	+ 12.6	- 1.5
Soap, Colours, Varnish, etc.	+ 16.7	- 0.9
Explosives	+ 69.0	- 38.1

There has been a steady increase in employment in the chemical trade from the outbreak of war. The number of women engaged on explosives which in July, 1914, was about 8,000, has considerably increased, workers having been attracted from the photographic and manufacturing branches, where work was comparatively slack, owing to lack of materials. Women have also been attracted from depressed trades such as printing, furniture, cycle and hardware. The division of male and female labour in the trade seems clearly defined, and there is practically no question of women working on processes previously done by men. In some cases women are being employed in the making of photographic plates.

COTTON

The following table shows the relative numbers of men and women employed in different processes in the cotton industry:

Cotton.	Census 1911.		Percentage of Women occupied.	Percentage of Men occupied.	% Increase of Women in 1901 Census.	% Increase of Men in 1901 Census.
	Total No. of Females of 10 years and upwards.	Total No. of Males of 10 years and upwards.				
Card and blowing room processes	55,488	14,695	79.1	20.9		
Spinning processes . . .	55,488	84,079	39.8	60.2		
Winding and Warping . . .	59,171	20,486	74.3	25.7		
Weaving . . .	190,922	82,341	69.9	30.1		
Other processes . . .	10,768	31,779	25.3	74.7		
Cotton — all processes . . .	371,837	233,380	61.4	38.6	+ 11.9	+ 18.5

During the first four months of the war, this industry was the most depressed of all trades, and in considering unemployment figures as a whole this fact should be noted. Before the war, production had over-reached demand, and in addition, at the outbreak of war, the trade suffered from other attendant disadvantages, viz., high rates for freight and insurance, the prohibition of code telegrams, and, during August, the dislocation of the machinery of bills of exchange, as well as the loss of German markets.¹

¹ For further information on the War and the Cotton Trade see article by Prof. S. J. Chapman and D. Kemp in *Economic Journal*, March, 1915.

The seriousness of unemployment in the cotton trade is not merely to be seen in the figures of unemployment, for in textile industries as in mining, a contraction in the demand for labour is usually met by a reduction in the time worked rather than by the discharge of a small number of workpeople. The following table traces the changes in the cotton trade from the outbreak of war to the middle of February :

(Number employed in July = 100.)

Males.

Month.	On Short Time.	On Overtime.	Contraction of Employment.	Known to have joined the Forces.	Net Displacement (-) or Replacement (+).
	%	%	%	%	%
September, 1914 .	43·5	0·1	17·2	4·3	- 12·9
October " .	40·5	0·4	17·1	6·8	- 10·3
November " .	42·1	0·9	14·8	8·3	- 6·5
December " .	30·4	1·6	13·3	9·6	- 3·7
February, 1915 .	11·2	2·2	11·1	11·6	+ 0·5

Females.

Month.	On Short Time.	On Overtime.	Contraction of Employment.
	%	%	%
September, 1914 . . .	44·6	0·2	14·9
October, " . . .	44·2	0·5	14·0
November, " . . .	46·2	0·9	11·5
December, " . . .	34·0	0·8	9·3
February, 1915 . . .	15·5	0·9	3·0

The general improvement in December was due partly to recovery of trade with the East, but in the main to the increase in the number of Government orders placed in Lancashire. To a very large extent these orders involved the substitution of coarser for finer yarn, a change which involved some adjustment in wages and working conditions.

From many cotton towns a shortage of male labour was reported, especially of piecers and of various classes of labour in the winding rooms. Spinners manipulate a pair of machines and require the aid of two operators—big piecers (men earning up to 26s. per week) and little piecers (boys). Before the war a serious shortage of little piecers was being felt, as boys now take less kindly to mill life.

Now the problem is complicated by the dearth of "big piecers" who have enlisted. The employment of women as piecers is a most controversial topic. A certain number of women is normally employed in some districts, generally in colliery districts when youths are not available, or in rural districts. Attempts have been made since the war to introduce young women and girls to assist in creeling, but there is a strong feeling on the part of the men against their employment—mainly on the ground that women, not being so physically strong as men, cannot do much of the work performed by a male piecer, and they tend to undercut men's wages. Substitution has, however, taken place, *e.g.*, in Bolton alone the number of women piecers has risen since the war from about 20 to 300. All are members of the Spinners' Union. The number of piecers has also risen in Manchester.

The point of view of the woman is not necessarily that of the man, and a prominent woman Trade Union organiser in Lancashire who is secretary to a Lancashire Trade and Labour Council sees no objection to women being employed as piecers, save the artificial restriction which prohibits a woman from becoming a spinner. A few women have, however, for years been employed as "spinners" at Lostock Junction, Lancs., at lower rates than the men. Efforts are being made by both the Board of Trade and the Local Government Board to induce the Operative Spinners' Union to consent to the employment of women in spinning mills. The membership of the Spinners' Amalgamation includes 1,500 women as partial members. The objections of the men to the introduction of women as spinners are stated to be :

(a) The probable undercutting of the wage rates paid to men spinners.

(b) The conditions when men and women work together are objectionable morally.

(c) Women's dress is unsuitable among swiftly moving machinery

One Trade Union official was of opinion that "the stoppage of the mills would be preferable to going back to the system of fifty years ago when women's labour was not at all uncommon in the spinning rooms. The work is no more suitable for women than coal-mining."

Weaving is done both by men and women, who are paid the same piece-rates, and do the same work, except that :

- (a) Men work the wider machines (quilts, etc.).
- (b) Men more often work six than four looms.
- (c) Men are able to set their own machines, hence they lose less time than the women.
- (d) Women do not rise to be overlookers.

The tendency is for the number of men weavers to decrease. Men prefer spinning and other better-paid trades. As trade has been very slack since the beginning of the war, the need for introducing more women in weaving has not arisen.

Women and men warpers are paid at the same piece-work rates, but men generally work two machines, while women work 1 or $1\frac{1}{2}$, *i.e.*, two women to three machines.

Both men and women are employed as twistors and drawers, and they work on the same piece rates. The women earn from 45s. to 60s., out of which they pay the wages of a reacher, about 10s. Women also pay the men to lift heavy beams, although the men sometimes help the women for nothing. Women are never employed as beamers; the work is too heavy, and the men would object. The number of women twistors and drawers is being slightly increased as the result of the war.

Women are normally employed in the warehouse section of dyeing and bleaching, in cutting up lengths, silking, ribboning, and folding light materials. Men normally fold the heavier materials and work the lapping machines. The rates of pay vary between time rates—good 16s. to 17s., low 12s. to 13s.—and piece rates 20s. to 25s. The Union tries to enforce a minimum of 18s. for women, but this is no more than an aspiration, the agreed scale of wages in 1912 for girls of 14 to 18 years of age being 5s. to 12s.; in other cases 10s. as a maximum.

Women have also taken men's places in dyeing-machine minding. Women are not normally engaged at all in the dyeing or bleaching departments, as the work is said by the men to be too dirty for women. The Trade Union rule with regard to women's employment in this process is being relaxed, conditional on women being paid the same rate as the men.

Since the war, women have been introduced in some cases as lapping machine minders, work which is normally done by men. Though stated by the men to be work too heavy for women, it could probably be done quite well by them. The men's Trade Union,

however, will probably allow the employment of women on this process, provided that they are paid at the same rates as the men.

During the last forty years there has been a tendency for the number of men among card-room operators to decrease in proportion to the women, the number of males in the trade being practically reduced to a minimum. The men's work, however, has not been taken by women, but a woman's process has displaced a man's process.

Ring-spinners are mainly women, though a few male ring-spinners are employed to do night work. Competition is increasing between female ring-spinners and male mule-spinners. The women earn from 15s. to 32s. per week, and the men from 30s. to 70s.

Since the war, a proposal was made by a certain employer to the Trade Union that three women each earning 15s. a week should be allowed to take the place of two men each earning 32s. a week who had enlisted for service, the women to do the lighter part of the work only, while the heavier part was to be transferred to the men. The proposal was unanimously rejected by the Union according to its usual practice of resisting strongly the employment of women on the lighter parts of men's work at lower rates, while the men are left with the heavier parts and no increase of pay.

In the cotton dyeing and finishing branch of the trade women are excluded normally from all wet processes, and there has been no relaxation of Trade Union rules since the war. In the calico printing trade, women have replaced men, but in no other process. There is some evidence of male and female competition in cotton polishing.

WOOL AND WORSTED

The following are the numbers employed in the trade according to the Census of 1911 :

Wool and Worsted.	Males.	Females.	Increase on 1901.	Increase on 1901.
			Males.	Females.
Spinning processes . . .	25,391	45,310		
Weaving processes . . .	24,419	67,499		
Other processes . . .	29,854	8,101		
Total . . .	79,664	120,910	9.0 %	4.2 %
Wool-sorting, cording, comb- ing . . .	15,867	6,238		

The trade has been considerably affected since the war by large Government orders for khaki and other cloth. The war boom is now, however, less than it was in the winter and spring, but an accumulation of overdue orders for civilian purposes has kept the trade brisk in spite of the reduction in the Government demand. The number of women employed has increased since the war, and especially during the month of December, when the Government demand was at its zenith, but the extra women employed have come into the trade rather to take up new work than to replace men. A shortage of dyes has from time to time hindered production in the trade.

Employers are now (August) finding increasing difficulty in obtaining both male and female labour, and in a number of cases are training and bringing new women into the trade. They complain of the difficulty, owing to separation allowances and billeting, of persuading married and other women to return.

The distinction between "woollen" and "worsted" is of primary importance in this trade. Broadly, the difference is one of locality as well as of quality of wool. The worsted trade is practically confined to the west of the West Riding of Yorkshire, where, by processes including "combing," which are carried on generally in separate mills, the long wool is spun and woven into fine cloth. Bradford, Huddersfield, and Halifax are the chief centres of this trade. The woollen trade is carried on in the eastern part of the West Riding, with Leeds as the chief centre. Here the short wool undergoes several processes, including carding, in the same mill. The distinctions between the long and the short wool, however, are breaking down with the introduction of improved machinery, which enables short wool to be combed as well as the long wool. The fundamental distinction is that in the worsted the wool is combed so that the fibres lie in horizontal lines, while in the woollen it is carded to present a felted appearance.

Men and women *weavers* are normally employed on the same processes save that:

- (a) Men do night work;
- (b) Men are able to "tune" their own machines and do small repairs, and so save time and the expense of a mechanic;
- (c) Men are generally employed on the better-class and better-paid work.

Men weavers are confined mainly to the Huddersfield district, where fine "suitings" are made, as against "dress materials" in Bradford, and "tweeds" in the Leeds or "heavy woollens" district. Outside the Huddersfield district, weaving, save in plush weaving and certain better class branches, is a woman's trade. In slack times the men on night work are the first to suffer from unemployment, and are not infrequently supported by their wives on day work.

Both females and males are normally employed in the Huddersfield district as winders, warpers, and *condenser minders*. Boys as well as women are employed as winders. In Scotland (Tweed district) boys are sometimes employed as condenser minders, but in Yorkshire this work is generally done by men or women.

There are two separate piece-work rates for men and women weavers in Huddersfield—the men earning an average wage of 27s., the women 18s. In Bradford and Leeds men and women are generally employed at the same piece-work rates, but no wages scale has been fixed as in Huddersfield, while the average is lower than in Huddersfield. On "khaki" work women may earn up to 27s. a week or as much as an average man. A number of married women have since the war returned to weaving, but, as the practice is for women to return to the trade under their maiden names, no exact information on this point is available. There is always a reserve of married women "jobbers" or "casuals" in the trade who come in at times of pressure.

Where men and women are employed as machine woolcombers on the same processes, either :

(a) Men do night work and the women day work, as in the case of "comb minders," "strong boxminders," or "furnishing boxminders";

or (b) the women work lighter machines, as in the case of "breakers off"—women 2 laps, men 4 laps;

or (c) the process itself is somewhat different, as in the carding department, where men or youths feed the machines on the "hopper" principle (bowl feeders), while women feed the machines on the easier "feed board" system. There is little doubt that women could, and would, long ago have been employed as "bowl feeders" on the "hopper" principle, were it not for the opposition, or as some would have it "the chivalry," of the men on the ground of the unsuitability of the work for women.

Where men and women do exactly the same work, day work and night work, a capable woman will sometimes turn out more than a man, but the men have, as a rule, the larger output. There is no doubt, however, that the lower wages of the women are out of proportion to their lesser output. In this branch of the trade there appear to be no cases of women taking men's work since the war.

Some women weavers have come in, attracted by the higher wages in wool-combing. Attempts were made in the early months of the war to put women on night work, but the men then successfully resisted this on the ground that there were sufficient semi- or unskilled men who could be drawn from other trades or be promoted in the woollen trade to meet this temporary demand. The men say they do not object to the introduction of women labour, provided that there is a shortage of male labour and that the women are paid the same rates as the men displaced. By this time, however, the shortage of both male and female labour is very obvious.

HOSIERY

Since the war the hosiery trade has been steadily and more than usually busy, and the employment of women has considerably increased. For some years the number of women drawn into the trade has been proportionately larger than that of the men, whose numbers have slightly decreased, as the following figures show :

—	Males.	Females.
1881 . . .	18,862	21,510
1891 . . .	18,200 (- 3·5)	30,887 (+ 43·6)
1901 . . .	13,893 (- 23·7)	34,481 (+ 11·6)
1911 . . .	14,957 (+ 7·5)	41,431 (+ 20·2)

The men in the trade are mostly elderly, and there has been no displacement of men by women. Considerable efforts are being made to capture German trade, and employers are laying down more plant :

(a) Small machines of the Griswold type on which women are employed.

(b) Large machines of the Cotton's type on which men are employed.

Trade is very brisk, large Government orders having been placed for pants and vests, which are being made on Cotton's machines (men's process); and for socks, which are being made in huge quantities by women on seamless machines. There is a shortage of women in the trade, especially in the rural districts, although they have been drawn in in large numbers, particularly in the East Midlands, from the lace trade. Belgian refugees have also found employment in this trade. Old men are being employed as winders. In London, women from depressed trades such as Court dressmaking, have been successfully employed in making socks by the Central Committee for Women's Employment.

SILK TRADE

The following figures show the percentage decrease of male and female labour in this trade over the ten years 1901 to 1911 :

Census 1901.			Census 1911.			Increase or Decrease per cent.		
Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
34,347	10,380	24,467	29,643	9,087	20,556	- 14.9	- 12.5	- 16.0

It will be seen that of recent years the silk trade has been a declining one.

At the end of the first six months of war the contraction of the number of women employed was 3.4 per cent. of the number employed in the previous July. The number of men recruited was 13.7 per cent., and the contraction in male employment was 8 per cent., leaving places to be filled to the extent of 5.7 per cent. of the total number of men employed in July.

Women are normally employed as *Winders*, *Coppers*, *Denters*, and *Spoolers*. They are employed in *Weaving* in places outside Leek, and the employment of women weavers is increasing in towns like Cheadle, Derby, Prestwich, Macclesfield, Manchester, and Nuneaton. The men's Union in Leek has made it impossible to employ women in that town, with the consequence that the silk weaving industry, save the very high-class trade which employs

only about 120 men, has almost entirely disappeared from Leek. Since the war the Leek men's Union has financed the organisation of the women weavers outside Leek into a Trade Union.

The women weavers' piece rates are generally about one-half that of the men's, and they earn from 12s. to 14s. a week, as compared with the men's 30s. It is stated that :

(a) The women need more supervision than the men.

(b) They require the assistance of a loom "*tackler*." One tackler generally attends 30 to 40 women, and his wages are 30s. per week. In Cheadle four tacklers are employed to 300 women.

Since the war the employment of women has largely increased in the net silk, spooling, and the artificial silk fabric branches of the trade, where women normally predominate. There has been a certain acceleration of displacement of men weavers by women. When this has taken place the men have asked that the women shall receive the same wage rates as the men. At present no women have been introduced to processes which have been hitherto performed by men only. Since the war the men but not the women weavers have received a war bonus of $7\frac{1}{2}$ per cent.

Braiding, Tie and Scarf Knitting.—Both men and women are employed as Braid Tenters. They do the same work save that :

1. Women mind 1 to 5 large machines and they are also assisted by a "*tackler*."

2. Men mind 30 to 60 small machines and sometimes 2 or 3 larger machines as well.

The men are paid piece-work rates and the women time rates, the men earning 30s. to 32s. a week, and the women about 16s. a week (Trade Union rate). It is said that the men prefer to keep the women on time work as they fear to be ousted by women on piece work ! Since the war a number of women braid tenters have displaced men, but they still receive the women's rates of pay and not the men's, with 1s. extra as war bonus.

On scarf and tie knitting men and women are employed at the same piece-work rates, but the men have the larger output. Women mind 2 to 4 machines, and also require the assistance of a "*tackler*." Men mind 6 to 8 machines unassisted. Men are also employed on night work, for which they are paid at a rate and a half. Women, however, are increasingly employed on these processes. Since the war women have also been employed as overlookers.

FOOD TRADES

The following table shows the increase per cent. from 1901 to 1911 of men and women employed in branches of the food trades most affecting women's labour :

Food Trades.	Census 1901.		Census 1911.		Increase per cent.	
	Males.	Females.	Males.	Females.	Males.	Females.
Jam, Preserve, Sweet Makers	6,232	15,899	9,332	20,058	49·7	26·1
Chocolate, Cocoa Makers	2,381	5,220	5,368	12,508	125·5	140·0
Mustard, Vinegar, Pickle Makers . .	2,006	2,184	3,659	3,522	82·4	61·2
Bread and Biscuit Makers	71,775	4,974	78,730	9,887	9·6	100·0
Grain Millers . . .	22,830	775	23,739	1,742	4·0	124·7
Fish Curers	2,255	608	3,051	1,451	35·3	138·6
Provision Curers . .		364		561		54·1

From these figures it is evident that of recent years the proportion of women employed in grain milling, chocolate making, bread and biscuit making, and fish curing has increased relatively to the number of men employed. Since the war the grain milling and meat-preserving sections of the trade have been especially busy, though in the earlier weeks of the war there was a general depression throughout the trade. The preparation and making up of rations for the troops have led to a considerable increase of female labour in the preserving section of the trade, which normally employs a considerable proportion of women. It is a common practice in the trade, for the factories to include tin making and paper-bag making departments. The above figures, however, do not include such extra workers, who really belong to another craft, though the state of their employment naturally depends upon the state of this particular trade. The amount of displacement of men by women throughout the industry has been very limited, though it has occurred in certain processes where men were unobtainable, but much of the work is heavy work and it is doubtful whether it is work in which women can be permanently retained.

Sugar Confectionery, Fruit Preserving, Chocolate Making, Pickling, etc.—This trade was subject, in the early months of the war, to a very considerable shortage in raw material—sugar. The Government,

however, came to its rescue, and bought up large supplies, and the trade began to revive in spite of the prohibition of the export of certain of its products. The trade employs a great number of women, who are normally engaged in such processes as picking, cutting, and preparing fruit and pickles. They also handle the machines for weighing and packing tea, coffee, cocoa, confectionery and corn-flour, besides attending the stamping and cutting machines in the tin-making department.

The trade employs a large proportion of a strong and somewhat rough type of women, and though the men's work is heavy a few of the women have, since the war, been employed on men's work, *e.g.*, in boiling sugar and peel, making sweets, loading and unloading the goods-lifts with tins, and carrying cardboard for packing.

Boiling sugar and peel is a very arduous task and the heat is excessive—so much so that the women are frequently known to faint. Only the strongest women undertake this work. The wages are low, and the women receive on this process 13s. to 13s. 9d. per week, with sometimes a bonus of 1s. or 2s. For the same work the men receive up to 26s. Their output is considerably more than the women's, though probably not as much as the disparity in the wages. There is a shortage of skilled male labour, especially in the chocolate branches of the trade. The demand for articles requiring a good deal of women's labour in preparing and packing, has been largely displaced by a demand for bulk goods for the Front, in the preparation of which a larger number of men are employed than in the ordinary trade. Where men are unavailable women have been employed, but although in at least one large factory the results are said to be satisfactory, employers as a whole do not favour this course, as the work is heavy and unsuitable for the majority of women. Women and strong girls have, however, largely taken the place of boys and youths, and they are generally employed at the same wage rates as the youths they have displaced, in the following process :

Feeding machines with slabs of sugar.

Shaking down sugar.

Papering cans.

It has been found, however, that more girls and young women are required than youths—sometimes three women to two boys, and sometimes two women to one boy.

In this trade wages are low, and though the work is heavy it is not very skilled, and depends very largely upon a fringe of casual male workers from other trades. There is, therefore, little likelihood of the women being retained after the war.

Bread and Biscuit Making.—For some months there has been a shortage of skilled men in bread making, and the scarcity of male labour has made it impossible to employ some women who would otherwise have been employed. A few women from laundries and the dressmaking trades have, however, been drawn into the trade as bakers. In this work two women are generally required to do the work of one man, and the women receive in some cases three-quarters of a man's wages. The women find the heat excessive, and require more time off than the men in consequence — generally half an hour in every four hours. Women are, however, being increasingly employed in "fancy" baking—cakes and pastry.

In flour mills a few women have been employed instead of boys as attendants to power machines, and women have replaced men to a certain extent in breweries in bottling and labelling, and in aerated-water factories.

TOBACCO

The following show the increase or decrease of employment in the tobacco trade between the years 1901 and 1911:

1901.		1911.		Increase or Decrease per cent.	
Males.	Females.	Males.	Females.	Males.	Females.
7,524	19,972	7,886	19,312	+ 4·8	– 3·3

At the beginning of the war the tobacco trade was not appreciably affected, but by October considerable unemployment occurred, especially in the cigar trade. By the month of February there was an increase in the number of women employed over those employed in July of the previous year of 5·2 per cent., and from that time onwards the trade has been extremely busy. Before the war the trade was subject to considerable fluctuations, and there was a large surplus of male labour, chiefly foreign, which has been absorbed since. Replacement of men by women has taken place to a very slight extent, though women and girls in many firms have taken the

place of boys, mostly in blind-alley occupations, and will probably be retained.

Just before Christmas, owing to the large consignments of cigarettes and tobacco sent to the troops, a considerable boom took place mainly in the cigarette branch of the trade, and this part of the trade has been increasingly busy since, owing to large War Office and private orders.

Besides cigarette-making proper, a considerable part of the cigarette trade consists of box making, soldering, labelling, packing, and dispatching, in which a large amount of female and boy labour is employed. Since the war, boys have almost entirely been replaced by girls. In the actual processes of making cigarettes, the line between men's and women's work is clearly defined. The men are engaged on the heavier work, such as handling the hogsheads of leaves, unpacking and cutting the leaves, and on work requiring skill, such as pan-work. Male mechanics also attend to the cigarette machines. Girls and women are employed in stripping the leaves and in feeding the cigarette machines and catching and examining the finished cigarettes. They solder tins and do every process save the handling of heavy cases in packing, wrapping, and dispatching. Women also make cigarettes by hand, though men make the better class "flat" cigarettes. Since the war, however, the great increase in demand has been for machine-made cigarettes.

BRUSH MAKING

According to the 1911 Census there are 9,813 males and 7,702 females employed in this trade. Since 1901 the increase in the numbers of women in the trade was 10 per cent. and of men 6 per cent. Since the war, employment in the trade has been fluctuating but on the whole good. Before the war, a German Kartel had succeeded in substantially monopolising the source of the bass supply and the trade in England was declining, but since the war the supply has again been secured. Health Insurance records show that married women and others who had ceased to be employed before the war have returned to the trade. The industry has been seriously handicapped since the war by the shortage of skilled men—the women in the trade being for the most part unskilled.

In Trade Union shops women are employed only on brush drawing, the Trade Union objecting to their employment on other processes

on the ground that it would tend to lower wages. None of the Unions appears to admit women to membership.

In the process known as pan-work, *i.e.*, the fastening of the hair and fibre into the stock of the brush by means of a mixture consisting largely of pitch, women previously worked fibre only, but since the war they have worked in both fibre and hair. In some cases women now do this pan-work on Army hair-brooms. The women cannot, however, finish the process entirely. The work is "trimmed off" by men, women boring the holes and "knotting" and "fixing" in the bristles. Some instances have occurred where women do the "knotting" and "trimming" themselves.

PRINTING AND BOOKBINDING

The table on page 183 shows the increase or decrease of persons engaged in the printing and bookbinding trades in England and Wales during the period 1901 to 1911.

It will be seen from this table that the entry of women into the printing trade has for some years been a normal feature, and that their numbers have rapidly increased in a much greater proportion than those of the men. In the bookbinding trade, on the other hand, there has been a diminution of women's employment and an increase of the employment of men.

The absence of particulars in the 1901 Census makes it impossible to estimate correctly where the increase of women's labour has taken place. The small number of women, however, in all grades of printers except "others" makes it extremely probable that the increase is not in the processes usually done by men, but among "folders," etc., who are usually women, and would be included under "others." The large increase in lithographers is proportional rather than numerical, and would refer chiefly to the "feeders."

Although all branches of the trade have not been equally affected by the war, this industry, as a whole, has suffered as severely as any. In view of the fact that the work is in no sense war work, some branches may for the duration of the war be classed practically among the "luxury" trades. A general depression was felt almost immediately on the outbreak of war and short time became general, but especially in the bookbinding trade. This depression lasted through August and September, the exports for these months

being only 76 and 79 per cent. of those for the corresponding months in 1913. Government orders, however, for the printing of banknotes, mobilisation orders, and various handbills and instructions to troops, did something to relieve the depression in the first months. From this point an improvement set in, the shortage of paper, which at first was stated to be an important factor in the trade depression, and especially in newspaper printing, was being readjusted, and at Christmas something like the usual seasonal revival took place. Compositors, however, continued throughout to suffer severely, and there is no doubt that unemployment, or short-time employment, has been responsible for much of the enlistment from the printing trade. That, and the transference of workers, especially bookbinders, to other industries, appear to have balanced almost exactly the contraction of employment in the trade, and the month of July has been the best month since the outbreak of war. Unless, however, the drain of enlistment upon the supply of labour becomes excessive, there can be no question of the importation of women into the trade in large numbers, as there is no prospect of any considerable revival during the war. There is, therefore, a twofold reason why no change in the position of women in the printing trade is likely at the present time :

(1) The heavy, difficult, and unhealthy character of much of the work, and the complicated nature of the machinery, make the employment of women impracticable, except in the capacity of subordinate workers.

(2) The supply of labour is at present adequate to the demand, and likely to remain so for some time to come.

That women are useful mainly in subordinate capacities may be inferred from the information supplied by the Census figures. The printing trade, so far as women are concerned, is shown to be essentially a young person's trade. Thus the number employed between the ages of 15 and 25 years is not far short of four times the number employed between the ages of 25 and 35, while the number of girls of 13 and 14 years employed alone exceeds by nearly 1,000 the total of women employed between the ages of 35 and 45. The greatest number is employed between the ages of 15 and 18 years, from which point a fairly rapid decline begins, those employed at 19 and 20 years being respectively 8·4 and 9·0 per cent. less than those of the preceding year. And the total employed between the

ages of 20 to 25 is only 28,935, as compared with 41,653 between 15 and 20 years.

These figures indicate that up to the present the printing trades have little prospects for women, and that they are, in fact, most employable as adolescents, and, as stated above, in subordinate capacities. At present the employment of women in the trade is in a transitional and uncertain state. As compositors, for instance, their position in the Edinburgh printing trade is to be considered anew in 1916. The employers' view, speaking generally, is that men are on the whole to be preferred to women in nearly every branch of the trade, and the employment of women is favoured only on account of their lower rates of pay, or, as one Trade Unionist expresses it, "their greater docility."

One of the chief objections urged by the Trade Unions who, on the whole, would like to see women out of the trade altogether, is that the lower scale of women's pay tends to depress the standard of wages in the whole trade. Their other objections are :

(I) The strenuous and unsuitable character of much of the work, from which follows as an almost inevitable consequence :

(II) The clear-cut division of labour into unskilled, done by women, and skilled, done by men, which, they fear, may lead ultimately to an overcrowding of the trade with skilled journeymen.

As already indicated, the effect of the war on the trade is mainly one of depression, and only in isolated instances are women doing work new to them or being employed in larger numbers in their own processes.

PROCESSES WHERE WOMEN ARE DOING WORK WHICH BEFORE THE WAR WAS DONE BY MEN

(1) *Feeding (Cylinder or Rotary Machines).*—To a limited extent women are taking the place of men as layers-on on cylinder or rotary machines. The unsuitable conditions in which the work is done and its strenuous character have hitherto prevented the employment of women. The process is easily learnt, however, and women are being employed in increasing numbers. Employers state that their work is, on the whole, as good as men's, but more labour is thrown upon the minder, who has to carry the heavy weights for the women. Sometimes a labourer is employed, one to three or four women, to do the heavy work. An arrangement has been made by

	Census of 1901.			Census of 1911.			Increase or Decrease per cent.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
Total of Printers, Lithographers, Bookbinders	149,793	119,834	29,959	184,075	140,968	43,107	+ 22.9	+ 17.6	+ 43.9
Printers—									
Hand Compositors				37,883	37,281	602	+ 29.6		
Machine Compositors				3,803	3,711	92			
Printing Machine Minders	106,181	96,488	9,693	7,982	7,773	209			
Stereotypers, Electrotypes				2,771	2,761	10	+ 19.5		+ 130.8
Others in Printing (including undefined)				85,198	63,736	21,462			
				137,637	115,262	22,375			
Lithographers, Copper, and Steel Plate Printers	11,725	10,682	1,043	15,029	12,746	2,283	+ 28.1	+ 19.3	+ 118.9
Bookbinders	31,887	12,664	19,223	31,409	12,960	18,449	- 1.5	+ 2.3	- 4.9

which the women are to do the work for the duration of the war for 23s. per week instead of the men's wage of 25s., in view of the labourer's services being required.

Non-union women are being employed at 16s. a week.

(2) *Folding and Inserting (heavier work).*—A few women are being employed in the heavier part of the work, normally done by men, especially for the feeding of the smaller folding machines. This is piece-work, and a woman with experience will earn up to 25s. Overtime rates differ from those paid to men, women receiving 6d. an hour instead of 10d.

(3) *Unpacking, Sorting, and Returning Newspapers.*—Women are being supplied by the Unions for this work, at 20s. instead of the men's rate of 25s., as a man must be engaged to lift heavy parcels for them.

(4) *Bookbinding.*—Women are at present doing work which is usually done by men, mainly in pasting the joints and in flush binding generally; also in some of the easier parts of vellum binding, which, as a process, is highly skilled and has hitherto been entirely in men's hands.

PROCESSES IN WHICH WOMEN ARE NORMALLY EMPLOYED

(I) *Feeding.*—The employment of women has been increasing for a considerable time. The work is unskilled and the reason sometimes given for employing girls instead of boys is that if boys are employed, too many are brought into the trade. A considerable number of boys, it is true, enter the trade as feeders and have to leave it at the age of eighteen. The work is low-paid, as a rule, starting at 5s. and rising to 10s. or 12s., but in a good firm, after four or five years' experience, a girl will get as much as 15s. or 16s. The low rate of pay prevailing, is due to the fact that girls cannot *set on* the machines themselves, as boys do, but require a boy, or, more usually, a man supervisor. Before the war, self-feeding machines were coming into use, and their introduction would ultimately do away with girl labour; but the difficulty of getting the machines has temporarily checked this movement.

In lithography feeding there is a tendency just now to employ women in increased numbers, and to take on girls where men were employed previously. The work needs little training and is poorly paid (5s. rising to 10s. or 12s.), but is done generally in more healthy surroundings than other processes of the trade.

(II) *Folding and Inserting (lighter work).*—This has always been women's work, and the number employed is still increasing. The wage is about 17s., as compared with 30s. and upwards paid to men, who do the heavier work of gathering and sorting, and night work as well.

(III) *Machine-ruling.*—The number of women is increasing, largely because the setting of the pens, which hitherto has been the chief obstacle, has become a comparatively simple process since the introduction of the latest machine. Men and women do the same work as minders, but the employment of women is opposed, and they are not admitted to the Machine Rulers' Union. The Machine Rulers' Union in Manchester prohibits the employment of women both in machine-minding and in ruling. The National Operative Printers' Union, however, accepts them as minders, fixing their minimum rate at 15s., men's 36s. Women earn 15s. to 18s. The war has had no marked effect on employment in this process.

(IV) *Reading.*—For some time past there has been a tendency to substitute girls for boys and it is likely to continue. The change is desirable, as the work is to some extent a blind-alley occupation for quick boys, who can earn up to 18s. but get no further unless they get into the newspaper trade, where, however, they cannot rise beyond 32s. 6d. In view of the fact that women are for the most part employed only for a period of years in the printing trade, this substitution of girls for boys is in accordance with the general attitude towards the employment of women in the trade.

Wages for girls and boys are the same.

(V) *Composing.*—There is a strong inclination on the part of Trade Unions and of some employers to keep women out of this branch altogether. The work is highly skilled, and the apprenticeship a long one, except in the case of hand composing in book printing, which requires less judgment and experience. It is in this branch of the trade that women are chiefly employed, to a small extent in London, and in larger numbers in the Provinces. The work is strenuous and carried on in a close atmosphere, and involves the lifting of heavy weights. For this reason it is generally necessary to have one man overlooking and lifting for two or three women. Women can, however, be advantageously employed in the first process of monotyping, which is done seated and is altogether less tiring. At present, however, monotyping machines are not

extensively used, being estimated at about 3 per cent. only of the whole trade. The output of women on monotypes is often as much as men's, and women joining the Union in London must receive a minimum of 45s. a week. Outside the Union the average is 32s. 6d. The employment of women as compositors varies in different parts of the country. In many places the opposition of the men is strong enough to keep them out of the process. In Edinburgh, where a number of women are employed on monotyping machines, the whole question is to be reconsidered in 1916.

(VI) *Bookbinding*.—Certain branches of the trade have been considerably depressed through the war. There has, however, been some increase in the employment of women. Certain processes are prohibited to women in some districts, but conditions vary, and the restrictions are, generally speaking, purely arbitrary. The disputed processes are:

- (i) Drawing on and gluing cloth covers (paper covers allowed).
- (ii) Quarter-binding where the edges are turned in (flush edges allowed).
- (iii) Pasting on end papers.

All are very simple processes.

Trade Union minimum for women, 15s. ; men, 36s. Men generally take on other work as well as quarter-binding, whereas women are employed on quarter-binding alone, earning 15s. to 18s.

THE FUTURE

Reports all agree that the condition of trade after the war will determine this. Men will be reinstated in their old positions, as far as possible, but employers seem, on the whole, inclined to keep on the women introduced since the war, if the condition of trade allows. Had the trade remained very prosperous during the war, it is more than probable that temporary concessions would have been made by the Unions other than those already mentioned in respect of the employment of women. But the Unions, generally speaking, are strong enough to be able to enforce a return to the *status quo* after the war, and, whatever changes may take place in the demand and supply of labour in the next twelve months, it is certain that no important changes would be countenanced as a permanent feature, without the fullest consideration on the part

of the Unions. Important changes, however, as already stated, are rendered improbable by the very nature of the printing-trade, where a great deal of the work is beyond the physical powers of women, and generally the readjustments which have been made to facilitate the employment of women in the heavier branches of the trade, are to be regarded as a temporary expedient.

At present the great majority of the 12,380 women described in the Census as "others in the printing trade," of whom no less than 10,600 are between the ages of 14 and 19, is employed in purely subordinate occupations as feeders, folders, messengers, etc., and the length of apprenticeship required, in order to qualify women for the more technical and skilled work, which is fixed at a minimum of four years, generally bars the way to any attempt at entering the more skilled branches. In certain directions, however, women may in the near future be more advantageously employed as letterpress feeders, as monotype workers, and in certain of the bookbinding processes hitherto reserved to men.

There has been some attempt to investigate the conditions of German work to discover whether the inclusion of more women would enable printers in England to take some of the work formerly done in Germany. There appears to be the greatest possibility of this in processes connected with lithography. The point is discussed in a paper on "British Lithography in 1915," read before the Royal Society of Arts on 18th Feb., 1915, by Mr. F. Vincent Brooks. The following is a quotation from the paper :

"The second point of vantage that the foreigner possesses is the much less cost, and, I must confess, the much better character of his transferring, and this transferring is a very important item in the total cost. The total volume of this work done in a German factory is very large, so that it is much cheapened by subdivision ; a workman is constantly employed filling the barest possible transfers, so bare that the solids generally have to be filled in on the stone or plate ; the work is carried out by quite an army of girls, other girls having previously cut up the transfers on the backing, that is the full size of the sheet to be printed. This is work for which women are exceptionally well suited, but such employment would be contrary to general usage in this country, and, I imagine, would meet with sturdy opposition from the Trade Unions ; and, unless working arrangements as to cost can be made, the British printer will be

hopelessly out of it, both with regard to the cost and general efficiency."

Some comment has been made on the fact that most German factories have been built lately, with a maximum of light and air, and are therefore suitable for the employment of women, while those in England are often very old and unsuitable.

Board of Trade, Earnings and Hours Inquiry, 1906.

Based on returns from 110,129 employees.

Men (over 20)	45.6 per cent.
Lads and Boys and Apprentices (under 20)	17.4 "
Women	24.2 "
Girls (under 18)	12.8 "

Average Earnings of Above.

Trade.	Men.	Lads and Boys.	Women.	Girls.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
Paper	29 0	10 8	11 11	7 6
Printing	36 10	8 7	12 3	6 4
Bookbinding	34 1	8 8	12 10	6 6
Paper stationery	31 4	8 6	11 11	6 6
Cardboard and boxes	28 10	10 3	12 3	6 1
Wall paper	32 11	19 2	13 2	7 9
Process block making	45 9	9 7	18 9	9 5

*Percentage of Wages. Working full time.
Men.*

Under 12s. 0d. . . . .	.1 per cent.	<i>s. d.</i>	<i>s. d.</i>	
<i>s. d.</i>	<i>s. d.</i>	40 0 to 45 0	. 5	9.7 per cent.
12 0 to 15 0 . . . . .	.5 "	45 0 to 50 0	. 3	"
15 0 to 20 0	6.2 "	50 0 to 55 0 . . . . .	. 1.6	"
20 0 to 25 0	15.2 "	55 0 to 60 0 . . . . .	. 1.8	"
25 0 to 30 0	14.5 "	60 0 to 65 0 . . . . .	. 3.6	"
30 0 to 35 0	20.9 "	Over 65s.		"
35 0 to 40 0	17.9 "			

Percentage of Wages. Working full time—continued.

—	Boys.	Women.	Girls.
<i>s. d.</i>	Per cent.	Per cent.	Per cent.
Under 3 0 . . . . .	.5	0	1.3
3 0 to 5 0	8.4	.7	24.4
5 0 to 10 0	54.9	25.8	64.0
10 0 to 15 0	26.0	52.2	8.6
15 0 to 20 0	8.9	16.5	.6
20 0 to 25 0	1.2	3.7	.1
25 0 to 30 0 . . . . .	.1	.8	0
Above 30 0	0	.3	0

POTTERY TRADES

The pottery trades are a group closely allied by reason of locality, process, and conditions, and include the making of general earthenware, china, sanitary tiles, and Rockingham and jet and brown ware. Women are employed direct or as attendants on others.

The numbers employed in 1901 and 1911 were :

	Census 1901.			Census 1911.			% Increase or Decrease.		
	Females.	Males.	Total.	Females.	Males.	Total.	Females.	Males.	Total.
Earthenware, China, Porcelain, etc. . .	24,477	37,998	62,475	29,439	40,424	69,863	+ 20.3	+ 6.4	+ 11.8

During the last ten years great changes in methods of production, mechanical and otherwise, have been introduced, and women have in consequence been drawn into the trade in increasing numbers. A notable example is the development of casting. The caster, who is generally a woman, has almost entirely displaced the hollow-ware presser, who was generally a man. In the words of a working potter : " Before the war, it was pitiable to see the number of hollow-ware pressers, skilled handicraftsmen, begging for labourers' jobs." Men casters receive piece rates about one-third higher than the women. In casting, as in pressing, the process is complicated by the introduction of the team system, by which a skilled man or woman presses or casts the article, while an unskilled woman, who is paid 12s. per week, finishes it.

Since the war, the pottery trade has been one of the depressed, but its workers have transferred to other industries, *e.g.*, silk, and many of the men have enlisted, which has in certain cases resulted in a shortage of male labour, and especially of youths, who have been attracted by the good money to be earned in the coal pits. The skilled males employed in the trade are mainly elderly men.

Before the war women were employed as :

Decorators and Transferers.—Average wages 11s. to 12s., save in the case of ground-layers, who receive about 20s. on piece-work rates.

Clay-workers—"pressers" or "jolliers." Women receive about 20s. per week on piece-work rates.

Pressers' attendants—"finishers," "spongers," "towers," and

"mould-runners," in which boys are sometimes employed. The wages earned by women on these processes are from 10s. to 14s. per week, and the rates are piece-work rates if paid direct by the employer, and time-work rates if paid by the presser.

Warehouse women—"sorters" are paid a time rate of about 9s. per week.

Decorating.—(a) "*Ground-laying.*" This process is held by the Trade Union to be a man's process, although women have come in at lower rates of pay during recent years. The process itself is, however, being displaced by "*aero-graphing,*" which is a woman's process.

(b) "*Painting,*" done by men, has been almost entirely displaced by lithography, which has been done by women since 1900.

Flat-ware Pressing.—Women entered the trade 30–35 years ago on the smaller articles, *e.g.*, cups and saucers, and 4 inch and 6 inch plates. They were, however, refused admission to the Union or recognition of any kind until about 1903. The first women were admitted at the time of the amalgamation of the Union in 1906.

The women are paid at piece-work rates about one-third less than the rates of the men. Men earn 30s. to 32s. and women 20s. per week.

Since the war, women have been employed on the pressing of 10 inch and 12 inch plates, and they are paid piece-work rates one-third lower than the men. The men claim that the women should be paid at the same piece-work rates. To this the women appear to object, urging that the effect of the men's wage-rate policy will be to exclude women from the process since :

(a) Women require more supervision than men.

(b) Women cannot set their own machines, and require the assistance of a mechanic.

By an agreement between the Unions and the employers the men who have enlisted are to be reinstated at the end of the war ; women who have taken their places are to receive the same wage-rate as the men displaced, and a number of women are now receiving men's rate of pay in consequence, but it is stated that in some cases this condition is infringed. It is also stated that children above the school-leaving age, especially girls, are being employed in considerable numbers as apprentices on time rates—girls at 2s., boys at 5s. per week. It is feared by the Union that the abnormal

number of apprentices thus introduced into the trade will undercut other classes of labour, especially women's labour, and consequently the labour of men.

A war bonus of $7\frac{1}{2}$ per cent. is being paid to all workers who are employed direct, and the Trade Union expects its members who employ "finishers" or others, on the "tally" system, to pass on the bonus.

In the early part of the war, the Pottery trade was very depressed, and the majority of its workpeople left for more remunerative employment, the men going largely to the collieries and to armament factories, and a few of the women to artificial silk-weaving in Leek. Since December the trade has shown greater activity, and there has been a shortage of labour, not among the more skilled workers, but among those less skilled. This is a notable exception to the general experience, and the reason appears to be that unskilled labour has found at the moment more remunerative employment elsewhere. The shortage of unskilled labour, rather than lack of orders, is the cause of some of the short time in the trade. Generally, owing to the stoppage of German and Austrian, and to some extent French pottery exports to the Colonies, U.S.A., and the United Kingdom, there is a big demand at the present time for all the cheaper grades of English pottery, whilst there is a slump in the richly decorated and high-priced goods. Probably owing to financial and shipping difficulties the bulk trade to U.S.A. and to South America is very quiet, so that many of the workers must be gradually diverted from the two classes of manufacturers of expensive pottery, and of bulk pottery for U.S.A. and South America, to the cheaper houses who are very busy.

FURNITURE

Furniture, being largely a luxury trade, has been considerably depressed since the outbreak of war, and is likely to remain so. The cheaper branches of the trade have been less slack than the other parts, and certain firms have replaced men *polishers* by women, but as this is a woman's trade as much as a man's, especially since the last strike, the replacement is no new feature due to the war. In some cases, on the other hand, women French polishers have been unemployed owing to the shortage of skilled bench men.

Large furniture firms have taken contracts for tents, kit-bags,

mosquito-nets, etc., and have taken on extra women to cope with the work, in some cases opening new factories for the purpose. Women upholsterers and women drawn from the lower branches of the tailoring trade have mainly come in to do this work.

Aeroplane contracts have also been placed with furniture firms, but up to the present women have only made covers for the wings and "doped" them, *i.e.*, varnished, which again is normally women's work.

In some factories and workshops women are gluing ammunition boxes, but here the line of demarcation between furniture and packing-case making is an elusive one; it is not possible to state whether they are displacing men or not.

There appears to be no feeling among the furniture Trade Unions against the further employment of women so long as they are paid the same piece-work rates as the men. The view, however, taken by most Trade Unions and employers is:

(a) Much of the work is impossible without long training, which the women are rarely prepared to give.

(b) Much of it is too heavy for women.

CHAPTER IV

THE EFFECTS OF THE WAR ON CREDIT, CURRENCY, AND FINANCE

THE following is the Report of a Conference called by the Organising Committee of Section F, consisting of Professor W. R. Scott (Chairman), Mr. J. E. Allen (Secretary), Sir Edward Brabrook, C.B., Professor C. F. Bastable, Dr. A. L. Bowley, Mr. Austen Chamberlain, M.P., Archdeacon Cunningham, Professor L. R. Dicksee, Professor E. C. K. Gonner, Mr. Francis W. Hirst, Professor A. W. Kirkaldy, Mr. D. M. Mason, M.P., Professor J. Shield Nicholson, Mr. E. Sykes.

The Organising Committee of Section F decided that a Report on the Effects of the War on Credit, Currency, and Finance should be submitted at the Annual Meeting. In order that this Report should be as full as possible it was considered essential to invite the co-operation of a number of experts from the City, and accordingly it was decided to proceed by means of a Conference rather than by the usual Research Committee. Of the original members, Mr. Austen Chamberlain took part in the early deliberations, and gave most valuable help. He retired on his appointment as Secretary of State for India. Professor Bowley resigned on undertaking work for the Ministry of Munitions.¹ The Organising Committee desires to thank those who devoted themselves to the making of the specialised investigations, many of which involved great labour and the placing of valuable personal and business experience at the disposal of the Conference.

The method of investigation adopted was to divide the whole inquiry into five heads, namely: (1) The Direct Effect of the War on Credit. (2) Public Borrowing as Affecting Credit. (3) War Measures and Currency. (4) War Taxation. (5) War and the Mechanism of Foreign Exchanges. Memoranda on these and related subjects were invited from the members of the Conference and from others. These Memoranda were circulated amongst the

¹ Mr. Chamberlain and Dr. Bowley resigned before the Report was drafted, and therefore have no responsibility for it.

members, with the request that they would return them, with comments, to the Secretary.

Memoranda were contributed by the following—

Professor Bastable
Sir Edward Brabrook, C.B.
Mr. E. J. Davies
Professor Dicksee
Mr. E. L. Franklin
Mr. Drummond Fraser
Mr. A. H. Gibson
Dr. C. K. Hobson

Mr. Joseph Kitchin
Mr. Robert Lumsden
Mr. D. M. Mason, M.P.
Mr. S. Metz
Professor J. S. Nicholson
Sir R. H. Inglis Palgrave, F.R.S.
Professor Scott
Mr. W. F. Spalding

Further, the main headings were divided into nineteen sub-heads.

I.—DIRECT EFFECT OF THE WAR ON CREDIT IN GREAT BRITAIN

How has the money market been affected by : 1. Hoarding ?
2. Changes in demand for commercial purposes ? 3. Government
demands ? 4. Foreign demands ? 5. Stock Exchange demands ?

II.—PUBLIC BORROWING AS AFFECTING CREDIT

- (1) Effects of the regulations as to the issue of new Capital.
- (2) Effects as judged by public and other deposits at the Bank of England and by the Bank Rate.
- (3) Extent to which Capital is withdrawn from enterprise.
- (4) Effect of borrowing in Great Britain by Allied Governments.
- (5) What proportion should be maintained between the amount borrowed for the War and the amount raised by taxation ?

III.—WAR MEASURES AND CURRENCY

(1) The Effect of Government Assistance to the Banks and Financial Houses in August, 1914.

(2) Was there hoarding owing to the War by (a) Banks ? (b) the public ? What was the effect on the stock of Gold ?

(3) Emergency Measures :

- (a) Treasury Notes.
- (b) Provision for the Suspension of the Bank Act (4 & 5 Geo. 5, c. 14, sec. 3).
- (c) The Moratorium.
- (d) Postal Notes made legal tender.

(4) How far were these measures (a) Necessary ? (b) Effective ?
 (c) Desirable ? What provision, if any, should be made for the withdrawal of Treasury Notes ?

(5) What was the effect on prices of the increased paper currency ?

IV.—WAR TAXATION

V.—WAR AND THE MECHANISM OF THE FOREIGN EXCHANGES

(1) What was the effect of the outbreak of war on the rate of Exchange ?

(2) What have been the principal fluctuations since and their causes ?

(3) How far were these fluctuations due to causes inseparable from the war, and how far were they preventable ?

(4) How far are the reasons generally assigned the true reasons ?

These questions were circulated amongst those who were judged to be able to supply first-hand information upon special points, and replies have been received from the following :

Professor W. Boyd Dawkins, F.R.S.

Mr. Barnard Ellinger

Lord Eversley

Mr. J. A. Hobson

Mr. A. W. Kiddy

Professor Oldham

Sir George Paish

Mr. W. Favill Tuke

Mr. Sidney Webb

Several meetings of the Conference were held in order to define the scope and character of the inquiry and to determine the best methods of procedure ; also to discuss the Memoranda, replies to questions, and the comments upon these. The members feel strongly that the time is not ripe for the presentation of a final Report, and that which follows is to be regarded as an interim one. Though necessarily incomplete, it has the advantage of attempting to present a picture of momentous events while most of them were fresh in the minds of those who had special opportunities for observation. Thus, while the present Report is wanting in finality, it will aim at focussing a body of reasoned opinion upon the causes and proximate effects of credit movements during the first year of the war. However much present judgments may be shown by subsequent events to have been in error, in the opinion of the Conference it was essential that they should be recorded.

SUMMARY OF THE MORE IMPORTANT EMERGENCY
MEASURES DURING THE YEAR 1914

Events have moved so rapidly within the last twelve months that even comparatively recent occurrences seem to have become remote. The rush and pressure of the times have been such that one is liable to forget matters which happened only a few months ago and would, in other circumstances, have been regarded as of the highest importance. Accordingly, for the sake of what follows, the following brief record of dates and facts may be pardoned in order to prevent digression in the later parts of the report.

In the early summer of 1914, credit in Great Britain and on the Continent was normal, with perhaps a tendency towards uneasiness. There is an almost inevitable disposition for people to claim wisdom and foresight after the event, but, judging from the quotation of Consols, there was small anxiety. The fluctuations in 1913 had been $75\frac{3}{4}$ –71, and the closing price on 25th June, 1914, was $74\frac{3}{4}$ –75, a price well over the average of the previous year. Early in July there were signs of caution in the chief money markets, following the assassination of the Archduke Francis Ferdinand at Sarajevo, on 28th June. The progress of negotiations between Austria and Serbia seems to have produced little effect, and even the presentation of Austria's ultimatum to Serbia on 24th July did not cause any marked uneasiness in London, as it was the general impression that the war would be localised. On the 25th there was a panic on the Vienna Bourse, while in London Consols fell to $72\frac{1}{4}$. Between that day and the following Tuesday (28th), when Austria declared war against Serbia, was a time of growing anxiety. In the week ending on 29th, Wednesday, Consols had fallen $4\frac{1}{2}$, Belgian 3 per Cents, $4\frac{3}{4}$, French 3 per Cents. 6, Russian $3\frac{1}{2}$ per cent. bonds 5, Russian 5 per Cents. (1908) $8\frac{1}{2}$, Austrian 4 per Cents. 8. By this time all the Stock Exchanges had closed except London and the provincial Exchanges, New York, and the official (parquet) Paris Exchange. The Bank Rate was raised from 3 per cent. to 4 per cent. on Thursday, the 30th. Remittances, both in payment of Stock Exchange accounts due by foreigners as well as the calling in of credits due from abroad, ceased except from America, while the closing of all the Continental Stock Exchanges except the official Paris market caused large quantities

of International stocks to be offered for sale in London. It so happened that this period of extreme tension coincided with the date fixed for the settlement, which had been arranged for 27-29th July. The failure of foreign clients of brokers to remit the sums due in London for the settlement made the position of these brokers precarious, and one important firm with foreign connections failed, while it was currently reported that many firms were prepared to hammer themselves. The failure of foreign remittances to the Stock Exchange affected transactions made before the crisis ; but, after the outbreak of hostilities with Serbia, there was a steady pressure of sales from the Continent. The effect of these was a reduction in the prices of securities, and this at once reacted on those stocks held on margin. Loans on Stock Exchange securities at this period amounted to about £80,000,000, of which £60,000,000 was lent by the Joint Stock Banks and the remainder by other bodies. A continued fall in quotations would cause the margin to disappear, and, therefore, the lenders would call for additional security, or they might call for repayment of the loan when due through anticipation of having to meet pressing demands themselves. The latter course was adopted by some, which threatened a further fall in the prices of stocks, and this again, if allowed to continue, would have depreciated the stocks held by banks, which would again have been serious if necessity arose for the liquidation of a part of these holdings. If demoralisation in the Stock Exchange was to be avoided, some action had to be taken upon Thursday (the 30th), and it was decided to close the Exchange.

The closing of the London Stock Exchange was the first of the series of Emergency Measures ; and, to some extent, it influenced those that followed. Prompt and decisive action was absolutely necessary ; but, had time for reflection been available, it is possible that less drastic measures would have sufficed. The closing of the Exchange was not the only event of first-class importance on that memorable Friday. Bill-brokers were in the habit of borrowing largely from the Joint Stock Banks upon the security of the foreign bills they held. During this week some of the banks called in their loans from the bill-brokers, who were forced to have recourse to the Bank of England either to borrow there or to discount their bills. The sums involved were large. In normal times it is

supposed that the Joint Stock Banks lend about £100,000,000 to bill-brokers in the form of credit at call or short notice. In the ten days ending 1st August, the Bank of England's holding of "other securities" increased by £31,700,000, the greater part of which is understood to have represented loans to the bill-brokers to meet the calls on them by the Joint Stock Banks. These large demands on the Bank of England were one cause of the rapid rise in the Bank Rate, which, after being 4 per cent. for one day (Thursday, 30th July), was doubled on Friday, and was increased to 10 per cent. on Saturday, 1st August. Concurrently with the difficulties of the bill-brokers, there were the even greater ones of the accepting houses. These institutions in effect guarantee that a foreign bill (arising out of a trade transaction either between this country and a foreign country or between two foreign countries) will be met at maturity. It is largely by this device that London is the financial centre of the world, and it is estimated that one-half of the world's foreign trade is financed by British credit. The acceptances of the accepting houses and foreign banks current at this time in London amounted to between £300,000,000 and £350,000,000, while those of the Joint Stock Banks are known to have been about £70,000,000. But, just as in the case of the stockbrokers, remittances were not forthcoming, or were delayed, or could only be made with great difficulty. London, early in the crisis, began to call in credit. All the available bills on London were quickly purchased by foreign debtors for transmission to London. New bills were not forthcoming, and there were great difficulties in procuring gold for shipment; in some cases it was impossible. In these circumstances, the position of the accepting houses was one of extreme hazard, and, as Mr. Franklin says, "the immediate effect of the outbreak of hostilities was to break down the whole fabric of foreign exchange throughout the world." On Sunday, 2nd August, a proclamation was issued which postponed payment of bills of exchange (other than a cheque or bill on demand) if accepted before the 4 August for a period of one calendar month from the date of its original maturity. On Monday, 3rd August, an Act, known as the Postponement of Payments Act (4 & 5 Geo. 5, c. 11) was passed, which authorised the King to suspend temporarily by proclamation other payments besides bills of exchange.

So far, the dramatic events of Friday, 31st July, and Saturday,

1st August, have been considered from the point of view of the reaction of the crisis on credit as regards foreign remittances. There remains the position in relation to internal credit. It appears that the Joint Stock Banks, or some of them, expected and prepared for considerable internal demands from their depositors. Mr. A. H. Gibson says that "the direct effects of the war on credit, as measured by the attitude of the British public during the early stages of the crisis, show that the loss of confidence was extremely slight. There was no run on the Joint Stock Banks or on the Savings Banks, and what degree of hoarding of gold took place at the commencement of the crisis was probably due to the lead given by some of the Joint Stock Banks paying out Bank of England notes instead of gold. This action caused a large number of people to whom notes had been paid, to take them to the Bank of England to change them into gold, which was required for holiday purposes. Almost without exception the reports of the Savings Banks for the year 1914 prove how trivial had been the influence of the crisis on their accumulated funds, the main influence having been a slight check to new business." There was a somewhat general apprehension prior to the issue of new Treasury Notes that, where a creditor insisted on payment in the form of legal tender, there might not be sufficient legal tender to meet all demands. The figures giving the loss of gold from London to the Provinces show that there were considerable internal demands for gold, the gold lost by the Bank of England from this cause having been £1,213,000 during the week ending 29th July, and as much as £8,211,000¹ in the next week, which included the days during which mobilisation took place. When it is remembered that Great Britain was not as yet at war, the financial situation was evidently serious. On 1st August, Germany declared war upon Russia, and the next day a state of war existed between Germany and France. War between Great Britain and Germany was declared on Tuesday, 4th August. Prior to the latter declaration, which might be expected to have affected our money market most, there had been the breakdown of the foreign exchanges and the closing of the Stock Exchange. It had been necessary to support the accepting houses by the Moratorium in their favour of 2nd August.

¹ A large part of this sum would be held by banks in anticipation of heavy withdrawals by their depositors.

Scarcity of legal tender was felt, and there was an apprehension in many quarters that war between this country and Germany would result in further grave disorders of credit. This was the situation which had to be faced on Sunday, 2nd August, and Monday, 3rd August. Fortunately, the Monday was a Bank Holiday, and by proclamation the Tuesday, Wednesday, and Thursday were appointed as special Bank Holidays, thus providing five days (if the Sunday be included) for the preparation of further emergency measures. An Act, known as the Currency and Bank Notes Act (4 & 5 Geo. 5, c. 14), was passed on 6th August, authorising the Treasury to issue Currency Notes for £1 and 10s. as legal tender for any amount. The holder of a Currency Note is entitled to obtain on demand during office hours at the Bank of England payment for the note at its face value in legal tender gold coin. Postal Orders were to be temporarily legal tender for the payment of any amount. This provision was revoked as from 3rd February, 1915, by proclamation. Under Clause 3 of this Act, the Bank of England and any Scottish or Irish Banks of Issue may issue notes in excess of the limit fixed by law so far as temporarily authorised by the Treasury, and subject to any conditions attached to that authority. Banks of Issue were indemnified against any liability on the ground of excess of issue after 1st August in pursuance of any authority from the Treasury. The former provision may, perhaps, be termed a suspension of the Bank Act; but, unless the legal limit has been exceeded, no formal suspension has actually taken place. Under these circumstances it is more correct to describe the arrangement as providing the machinery by which the Act may be suspended should the need arise. Further Treasury Notes were issuable to bankers through the Bank of England up to 20 per cent. of their liabilities on deposit and current accounts.

Closely connected with these measures was the proclamation of 6th August, under the Act 4 & 5 Geo. 5, c. 11, postponing other payments besides bills of exchange till 3rd September (subsequently extended till 3rd November), with certain exceptions, the chief of which were payments of wages or salary, sums not exceeding £5, dividends on trustee stocks, cashing of bank notes by the issuing banks, payments by Government Departments (including Old Age Pensions and liabilities under the National Insurance Act). These measures provided for the re-opening of the banks on Friday,

7th August, upon a basis which, if artificial, was believed to have protected the banks. But that protection was founded on the Moratorium, which was so strange to English practice that a few years ago it was described as "a strange beast inhabiting the Balkans." In making the first steps towards more normal conditions, it was necessary that foreign exchange should be restored and the Stock Exchange re-opened. As regards the former, exchange transactions in the early days of August were remarkable. The value of the sovereign rose as much as 30 per cent. in a single day in New York. On the other hand, owing to a temporary adverse balance due to France, the sovereign depreciated in Paris by 4 per cent. Between 12th August and 5th September, a scheme had been formulated which provided that the Bank of England would provide acceptors with funds to pay all approved pre-Moratorium bills at maturity. The Bank was entitled to interest on these advances at 2 per cent. above bank rate, and undertook not to claim repayment of any sums not recovered by acceptors from their clients till one year after the end of the war. The Joint Stock Banks undertook, with the assistance of the Bank of England and the Government, to finance new bills upon similar terms. The Government guaranteed the Bank of England against any loss which it might sustain in carrying out this scheme. This guarantee received statutory sanction by the Government War Obligations Act, 1914 (5 Geo. 5, c. 11). Loans to the Stock Exchange were next taken in hand. Under a scheme for Government assistance, dated 31st October, as regards Account to Account Loans which had been made on the security of stocks by lenders, other than banks "to whom currency facilities were open," or members of the Stock Exchange, the Government arranged with the Bank of England to advance 60 per cent. of the sums outstanding on 29th July, securities being valued for purposes of such advance at the making-up prices of 29th July. The Bank undertook not to press for repayment until twelve months after the conclusion of peace, the rate of interest being 1 per cent. above Bank Rate, with a minimum of 5 per cent. The banks to whom currency facilities were open, undertook not to press for repayment of Account to Account Loans, nor to require further margin until twelve months after the conclusion of peace. The total advances on foreign bills under the Government Guarantee were £120,000,000.

The sum advanced on pre-Moratorium bills to enable acceptors to meet their engagements at maturity was £60,386,000, and it was estimated that at the end of the war, bills aggregating £50,000,000 would remain in "cold storage."¹ The advances by the Bank of England to the Stock Exchange under the Treasury scheme of 31st October were returned at £520,059.² The way was now prepared for completing the July settlement on the Stock Exchange, and a patched-up settlement was effected on 18th November. Meanwhile, though the Exchange remained closed, dealings in stocks had been effected by negotiation, and a scale of minimum prices had been drawn up by the Committee. The general Moratorium having come to an end on 3rd November, there was no reason to delay the opening of the Exchange, and this event took place on 4th January, 1915, under somewhat drastic regulations imposed by the Treasury.

I.—THE DIRECT EFFECTS OF THE WAR UPON CREDIT

Having traced, descriptively, the external results of the earlier months of the war on credit, we propose in the present section to inquire into some general questions relating to the effect of a state of war of the magnitude of the present struggle upon credit, considered as far as possible in isolation from emergency measures. From the point of view both of practical finance and of economic theory, the consequences of a remarkable and sudden strain upon credit are of surpassing interest. While the outbreak of previous great wars has occasioned somewhat similar disturbances, the long period of cessation from contests between great Powers, as well as the more highly developed organisation of modern credit, render it advisable to consider the position at the present time *de novo*. From the standpoint of the Economist it is unfortunate—while from that of the citizen it may have been fortunate—that complete materials for the observation of the unmitigated effects of the present war upon credit have been largely modified by counter-acting influences, many of which were deliberately designed to counteract the direct consequences of hostilities as affecting the credit system in this country. In particular, as already shown

¹ *Hansard, Commons*, lxxviii, p. 1545.

² *Ibid.*, lxxi, p. 853.

(page 199), the closing of the Stock Exchange took place before Great Britain was involved in war. Accordingly, direct observation of the exact effects of war on credit cannot be made with completeness, though we consider it advisable to record such results as we have been able to obtain.

Credit is an organic growth. The normal condition assumes a certain degree of stability in the environment in which it works. In the usual credit cycle, though conditions vary as between the maximum and minimum points of expansion, in both, a great number of the factors which affect the calculations of business men remain the same or are altered only to a very slight extent. War on a large scale either changes all conditions or (what is temporarily of equal importance concerning credit) it gives rise to the fear that all conditions may be altered. On the material side, war makes great inroads into the store of commodities and many calls on services, while it deflects a large amount of labour from productive to destructive purposes. "Credit," as Mr. A. H. Gibson puts it, "assumes that goods will be brought to market, or be produced in due time, and sold, and that securities, which in reality have their capital value based on future productive power, will not materially fall in current market values through lack of confidence in future production. War materially weakens both these assumptions. When war shakes the foundations of confidence, it is obvious that it must immediately cause a serious restriction in the mobility or transfer of credit, and consequently reduce, for the time being, the rate of current and future production, for production cannot, obviously, be carried on without the transfer of credit; and the community suffers through the restriction of credit."

Allusion has already been made to the difficulties of the accepting houses, the bill-brokers, and the Stock Exchange. These reacted on the resources of the Joint Stock Banks, for the effect of the war had been to solidify assets hitherto regarded as liquid. The financial life of the City appeared in danger of being frozen at or near its source. This was not so in reality, for the ultimate basis of credit is the future goods and services which can be relied upon to come to market later. Not only does war make it uncertain that some of the anticipated future production will reach the market; but also it makes a violent alteration in the relative

values of capital goods and consumable goods. "For the purposes of war only the right to goods, consumable now or soon, is useful."¹ Thus, there is inevitably a double revolution in credit occasioned by war, first in the widespread falsification of anticipations, and secondly in the valuation of immediate consumable commodities. Both tendencies arrest the mobility of credit instruments, and some of the credit instruments become temporarily immobile; and, to the extent to which this phenomenon exists, credit temporarily ceases. It is estimated that the assets which the Joint Stock Banks had available in a comparatively mobile form—consisting of the gold and Bank of England notes which they held in their strong-rooms and tills and balances at the Bank of England—did not exceed 15 per cent. of the liabilities to depositors. Loans at call or short notice were largely uncalled. Stock Exchange Securities held either as investments or collateral security were to a considerable extent unsaleable, during the first week they were altogether unsaleable except at a dangerous sacrifice. Bills of exchange in the banks' own portfolios might or might not be met at maturity, and bills which the banks had themselves accepted might have to be met out of the banks' own resources. Thus, a large part of bankers' resources were in danger of becoming immobile and solidified.

There were four main causes which combined to "immobilise credit" at the outbreak of war:

(1) The fear by borrowers that they might have to repay immediately large amounts of credit which the lenders had transferred to them previously on condition that it was withdrawable on demand. A considerable part of this borrowed credit had been re-transferred to others who desired to anticipate the proceeds of future sales or services, and it was not callable immediately.

(2) The actual calling in of, or attempt to call in, by certain banks, financial houses, and other institutions, large amounts of credit lent on demand.

(3) The general fear (until Treasury Notes were issued) that, if the lender insisted on the borrower repaying credit in the form of legal-tender currency, there might not be sufficient legal tender to meet all demands.

(4) The inability of foreign correspondents, owing to the collapse

¹ *Economic Journal*, xxiv, p. 486,

of the exchanges and for other reasons, to remit credit to this country to meet maturing liabilities and other demand calls.

Elsewhere we discuss the effect of the emergency measures. These have aimed at re-establishing confidence, and they have succeeded in restoring the mobility of many forms of credit immobilised at the outbreak of war. But this is not a complete restoration of credit. As long as any emergency measures remain, to that extent there will be a failure to reach the standard of normal credit. Its main characteristic in this country was its spontaneous character, and necessarily as long as artificial and extraneous devices are required, the position will be something intermediate between confidence and credit in the fullest sense of the word. In fact, the progress towards a normal return to credit will be marked by the gradual recall of successive emergency measures. When credit is sound, just as in the case of a healthy man, it does not need tonics, nor is it conscious of its own state. It works largely intuitively. All questioning, even a demonstration of "its inherent soundness," is an evidence that there is some danger of a failure of complete confidence at one or more points. The sound state of credit is that which needs no external help.

II.—PUBLIC BORROWING FOR THE WAR AS AFFECTING CREDIT

(i) *General Effects of Public Borrowing on Credit.*—Public borrowing may be regarded from two points of view. From the first or abstract point of view, credit is based on claims to goods and services; from the second or concrete point of view, credit is measured by prices on the Stock Exchange or by the rates of interest current in the Money Market.

Loans imply interest, and interest implies taxation in future years. The actual subscription of War Loans involves the handing over to the Government of claims to consumable goods and services for the destructive purposes of war, in return for which the Government gives the subscribers a transferable lien on future goods and services.

Extensive borrowing by Governments reduces the mobility of existing credit; because the payment of calls, as well as the expectation of further loans, reacts on the previous state of credit.

As already shown, the outbreak of hostilities tends to contract credit not only within the area directly affected but in adjoining areas. In a great war the uncertainty extends to almost every market for capital. Thus, war results in a general rise of interest. That rise is accentuated in a belligerent country both by the risks of war to it and by the contraction of its usual production through the calls on its productive power and also by the necessity for public borrowing. The State now exerts an urgent demand for capital in competition with, or even to the exclusion of, the remaining demands for industry. That demand is supplied from various sources. First, most of the floating supply of capital (namely, that capital which has not as yet been definitely committed to specific production) is subscribed, then circulating capital which has been diverted from its usual uses owing to the industries employing it having ceased or being contracted through the existence of hostilities. Further, sums are found by the postponement of repairs and renewals which were required to maintain the full efficiency of production. Foreign investments are sold to a greater or less extent. The latter source of supply can be tapped only by an increase in the rate of interest on Government loans lessening the disparity between the yields on home and foreign investments. The increase in the rate of interest offered by the Government has the further effect of being a direct incentive to new savings. It is to be remembered that the Government not only borrows but it also disburses the capital it raises. Many of these disbursements are made within the country, and a high rate of interest acts as a direct incentive to the saving of a considerable part of these, as well as to increased economy amongst the remainder of the community. In the first War Loan of a series, the larger proportion of the subscriptions will be drawn from floating capital, but later issues depend for their success to an increased degree on new savings; and, in the present instance, these must be in excess of those made in time of peace. Hence, the rate of interest offered in order to induce such additional savings will be high and will tend to increase. Thus, the most evident effect of extensive Government borrowing, as has been shown by the two War Loans, is the tendency towards a rise in the price to be paid for each successive loan (*i.e.*, the rate of interest will rise, not only for Government loans, but for all borrowing). This is no new fact

in English history, and this tendency may be illustrated by a table giving the average price of Government Stock before, during, and after the Napoleonic Wars :

Consolidated Three Per Cents.

Period.	Average Price.	Period.	Average Price.
1792	84 $\frac{1}{4}$	1810-14	62 $\frac{1}{2}$
1793	75 $\frac{1}{4}$	1815-19	69 $\frac{1}{4}$
1794	67 $\frac{1}{4}$	1820-24	78 $\frac{1}{8}$
1795-99	58 $\frac{1}{8}$	1825-29	84 $\frac{3}{8}$
1800-04	63 $\frac{1}{4}$	1830-34	85 $\frac{1}{2}$
1805-09	63	1835-44	92 $\frac{1}{2}$

The quick rise in Government credit after Waterloo explains the success of the great conversion schemes of 1822, 1824, and 1830, all of which involved a material reduction in the rate of interest. One inference to be drawn from the above table is that all loans issued during the present war should bear early dates of redemption, so that the Government may convert them into loans bearing a lower rate of interest if the conditions of the Money Market ten or fifteen years hence permit such an operation. Pitt floated some of his war loans at an enormous discount, yet they were being redeemed, before the Boer War sent down the price of Consols, at a considerable premium.

Let us see how the rise in the rate of interest is demonstrated by the terms on which the two War Loans have been issued. The first loan was £350,000,000 of 3 $\frac{1}{2}$ per cents. at £95 : the loan being redeemable in thirteen years (or in ten years at the option of the Government). The yield was thus 3 $\frac{1}{2}$ per cent. plus a bonus of £5 per cent. on redemption at par in 1928, or three years earlier if the Government should so choose. At the time when this first loan appeared, therefore, the credit of the British Government stood at something between 3 $\frac{3}{4}$ and 4 per cent.

The second War Loan, which appeared at the end of June, 1915, was made on a very different basis. This time it was a 4 $\frac{1}{2}$ per cent. loan, at par, and redeemable in 1945, or at any date after 1st December, 1925, at the option of the Government. The terms, moreover, were really more favourable to the investor than appears at first sight, for (1) a full half-year's interest is payable on 1st December, although the instalments will not be completed until 26th October,

and (2) it is provided that for every £100 held by a subscriber to the new War Loan he may obtain another £100 in exchange for the same amount in the old War Loan on payment of the difference of £5 in the respective prices of issue. For £100 held in the new War Loan, the subscriber may obtain another £50 in exchange for £75 Consols which bear interest at $2\frac{1}{2}$ per cent., or another £50 in exchange for £67 of £2 15s. per cent. annuities, or another £50 in exchange for £78 of £2 10s. per cent. annuities.

It is a condition of all these exchanges that new capital shall be raised to the extent of £105 for every £100 old War Loan, £100 for every £75 Consols, £67 annuities at $2\frac{3}{4}$ per cent., or £78 annuities at $2\frac{1}{2}$. The market for these various securities has been affected by the regulation of the Stock Exchange, approved by the Government, fixing a minimum price for them, which has greatly restricted dealings in them. That minimum price is subject to variation, and has already been diminished in consequence of the issue of the prospectus of the new War Loan. The market price would probably be much lower if the market were free. As persons desirous of subscribing for the new War Loan either with or without the purpose of exercising the option of exchange will in many cases have to realise other investments, the Stock Markets generally might be expected to fall. Much will depend on the extent to which Consols and the annuities are offered for conversion. It is to be borne in mind that Consols are only an annuity, the capital value of which depends on the price current in the Stock Market. It has been necessary, whenever the Government has desired to lower the rate of interest upon Consols, to give the holders an option of being paid out at par, that is, at the nominal capital value corresponding to the annuity at the current rate of interest. Upon that, Consols now stand to produce interest at £2 10s. on a nominal £100. By the proposals for conversion of £75 Consols into £50 War Loan that rate of interest is raised to £3 per cent., but the nominal capital which the investment represents is reduced.

A further point has been well made by Mr. A. H. Gibson : " When considering the matter of the effect on credit of great public borrowing for the purpose of war it has always to be borne in mind that the total amount expended is not altogether lost to the nation. Part of it is transferred in the form of profit to manufacturers and others engaged on war materials, and part of it is represented

by ammunition and other Government stores, which the community has produced by working more strenuously (*e.g.*, by overtime) and with more energy than it would have expended in peace times. But that part which is represented by ammunition and other Government stores, the energy to produce which has been diverted from productive industry, is, of course, irretrievably lost to the nation, as is likewise that part expended on the purchase of ammunition and other stores required for the prosecution of war."

(ii) *Effect of the Regulations as to the Issue of New Capital.*—In times of prosperity, applications for new capital are freely made and freely responded to, in general, with the effect of somewhat depreciating the existing capital. Probably with a view to conserving the lending power of the country in the national interest, a temporary regulation has been made by which the Treasury is responsible for the sanctioning of any application for new capital before it can be made on the market. The grounds upon which the Treasury will base their action in this matter have not, so far as we know, been made public, but it is presumed that they imply some inquiry as to whether the public advantage would be served by the proposed issue. The Treasury may and do repudiate the idea that their permission means approval, but the public will certainly infer that it does, and will give credit to the issue accordingly.

(iii) *Extent to which Capital is Withdrawn from Enterprise.*—The free supply of capital towards industrial and other enterprises is interfered with by the condition of war and the public borrowing which is the necessary consequence, in the following ways :

(1) The withdrawal from the resources of capitalists of the sums they subscribe to the public loans.

(2) In the depreciation of securities, which renders realisation difficult without loss.

(3) In the withdrawal from the labour market of workmen of military age.

(4) In the contraction of the opportunities for investment with neutral countries.

(5) In the impossibility of investment with enemy countries.

(6) In the lack of enterprise and the feeling of uncertainty which prevail during warfare,

(7) In the anticipation of difficult times to come when the war is over.

Dr. C. K. Hobson has traced the effect of Government borrowing upon our investments in foreign countries. It is no longer possible, he says, to furnish the large streams of capital which normally flow into industries at home and abroad. It is more than doubtful whether Great Britain is maintaining its accumulated capital intact, and whether the wear and tear of plant, buildings, etc., in this country are being fully replaced. It is unfortunately clear that British holdings of foreign securities are being reduced. The appearance of the second War Loan was the signal for an outburst of selling, mainly of American securities. Hitherto the United States has owed us money. At the outbreak of war, according to the Secretary of the Treasury, American business men and bankers were indebted to London in the sum of approximately £90,000,000, maturing by 1st January, 1915. A large part of this amount was undoubtedly repaid in the form of gold placed to the credit of the Bank of England in Ottawa, and in the form of food-stuffs, merchandise, and war equipment sent to Great Britain.

(iv) *Effect of Borrowing in Great Britain by Allied Governments.*—This takes two forms: (1) a direct subsidy by the British Government to its Allies; (2) the subscription in London of a loan to an Ally. We do not know to what extent assistance of the first class has been rendered, or whether it has been mainly in money or in kind; but it is obvious that our Allies have had to depend largely upon the aid of our Government in providing material aid for carrying on the war in various ways. Two illustrations, however, may be given from official sources of our financial arrangements with France and Russia.

On 15th February, 1915, Mr. Lloyd George, as Chancellor of the Exchequer, explained the arrangements made by him with the French and Russian Finance Ministers. The three Ministers decided that each country should raise money for its own needs within its own markets, except in the case of borrowing by the small States.

“We decided that each of the great allied countries should contribute a portion of every loan made to the small States who were either in with us now, or prepared to come in later on, that

the responsibility should be divided between the three countries, and that at an opportune moment a joint loan should be floated to cover the advances either already made, or to be made, to these countries outside the three great allied countries."

£32,000,000 had been advanced to Russia, and Russia had shipped eight millions in gold to England. In order to meet the difficulties of exchange which prevented Russian merchants discharging their liabilities in this country, Mr. Lloyd George had arranged to accept Russian Treasury bills against the bills due from Russian merchants, Russia collecting the debts in roubles in her own country.

The second illustration is taken from a speech made by the French Minister of Finance on 3rd June, describing the arrangement made by his Government with the British Government. M. Ribot reckoned that France would be spending almost 2½ millions sterling a day during the next three months, and he admitted candidly the great difficulty of finding that enormous sum, since both revenue and subscriptions to Treasury or National Defence bonds were coming in badly. M. Ribot estimated that the French Government would have to pay some sixty millions sterling to the United States, Canada, and England during the next six months. He proposed to pay this sum by a plan which the *Statist* considers excellent. The British Government has agreed to take £60,000,000 of French Treasury Bonds, repayable one year after peace, at a rate of discount equal to that which our own Government pays upon its own Treasury bonds, which is a very moderate one. In return, the French Government agrees to advance to our Government twenty millions sterling in gold. By taking payment in this way the *Statist* says, somewhat optimistically, that our Government assures the exchange with the United States.

It is also to be noted that much money has been raised and expended for the benefit of refugees from the Allied nations and in other ways for the relief of those affected by the war.

The actual closing of the Stock Exchange and the subsequent great restrictions of its operations have prevented any direct subscriptions in the English market to loans to friendly foreign countries, and for some time to come such loans could be floated successfully only under exceptional conditions.

III.—WAR MEASURES AND CURRENCY

(i) *Effect of Assistance by the Government to Banks and Financial Houses in August, 1914.*—With the effect of Government assistance to Banks and Financial Houses we have already dealt in our “Summary of Emergency Measures.” The main purpose of these measures was to prevent a serious derangement of credit and to impart a momentum to its machinery which would enable it to resume its operations. The banks were largely dependent on the accepting houses and the bill-brokers, the bill-brokers were dependent on the accepting houses, and the accepting houses were dependent on their foreign correspondents, who were, owing to the breakdown of the exchanges, unable to send the expected remittances.

The first measure put into force was the Bill Moratorium proclaimed on Sunday, 2nd August, and subsequently extended. The proclamation enabled acceptors to postpone for a month payment of any bill accepted before 4th August, on reacceptance for the amount plus interest to the new date of payment at the Bank Rate current on the date of reacceptance. This proclamation gave breathing time to acceptors who were unable, for various reasons, to take up their maturing acceptances, and consequently prevented a long chain of bankruptcies.

The next steps taken were designed to restore confidence among the banks, who have always on deposit with them large sums of credit withdrawable at call or short notice. The Government protected them by three important measures, which were very effectual in giving new confidence to the banks and the public—

(A) The General Moratorium proclaimed on 6th August, and subsequently extended, gave the banks and other debtors (with certain exceptions) power to suspend payment for one month, of debts payable before the date of the proclamation. But Bank Notes and Treasury Notes were specially excluded, being convertible into gold during the Moratorium.

(B) The Currency and Bank Notes Act of 6th August, 1914, authorised the Treasury to suspend the Bank Act if necessary. An unlimited amount of Bank Notes would then have been available if required. The power to suspend the Bank Act was not used.

(C) The same Act also empowered the Treasury to issue £1 and

10s. currency notes, which were to be legal tender in the United Kingdom. In a memorandum issued by the Treasury, it was announced that currency notes would be issued through the Bank of England to bankers as and when required up to a maximum limit, not exceeding, in the case of any bank, 20 per cent. of its liabilities on deposit and current accounts, in the form of an advance by the Treasury, the security being a floating charge on the bank's assets in priority to all other charges, bearing interest from day to day at the current Bank Rate. By this measure the banks were placed in the position of being able to obtain, if required, an advance of 225 millions of legal tender currency. In the initial stages of the crisis, the banks took nearly 13 millions. The advances outstanding on 9th June, 1915, amounted to only £139,000. To give time for the Treasury Notes to be printed, August Bank Holiday was extended for the four days, Monday, 3rd August, to Thursday, 6th August, inclusive.

With the object of placing the bill market again in a position to entertain new business, and thus provide international currency, the Government, on 12th August, 1914, announced that the Bank of England, under Government guarantee against loss, would discount at Bank Rate, without recourse to the holders, all approved bills accepted before 4th August. It was also announced that the acceptors of such bills discounted at the Bank of England might postpone payment at maturity by paying interest at 2 per cent. above Bank Rate. The effect of this measure did much to restore British credit abroad. The banks immediately sent large parcels of bills for discount to the Bank of England. New bills accepted after the Moratorium, however, came forward slowly. Acceptors were not very willing to be drawn on, except when the bills were drawn against goods consigned to England, because, so long as the exchanges were not working freely, there was still the danger of non-receipt of foreign remittance at date of maturity. The banks also showed disinclination to buy new bills from the brokers.

The Chancellor of the Exchequer, in his speech on 27th November, stated that the total amount of bills discounted on the Government guarantee had been £120,000,000. (This proved that of the £350,000,000 to £500,000,000 amount of bills which were outstanding at the outbreak of war, most had been disposed of in the ordinary course.)

On 5th September, 1914, the Government announced that the following important arrangements had been made with the Bank of England :

(A) The Bank of England will provide (where required) acceptors with the funds necessary to pay all approved pre-Moratorium bills at maturity. This course will release the drawers and endorsers of such bills from their liabilities as parties to these bills, but their liability under any agreement with the acceptors for payment or cover will be retained.

(B) The acceptors will be under obligation to collect from their clients all the funds due to them as soon as possible, and to apply those funds to repayment of the advances made by the Bank of England. Interest will be charged upon these advances at 2 per cent. above the ruling Bank Rate.

(C) The Bank of England undertakes not to claim repayment of any amounts not recovered by the acceptors from their clients for a period of one year after the close of the war. Until the end of this period the Bank of England's claim will rank after claims in respect of post-Moratorium transactions.

(D) In order to facilitate fresh business and the movement of produce and merchandise from and to all parts of the world, the Joint Stock Banks have arranged, with the co-operation, if necessary, of the Bank of England and the Government, to advance to clients the amounts necessary to pay their acceptances at maturity where the funds have not been provided in due time by the clients of the acceptors.

The arrangements announced on 5th September, 1914, have since had a most important influence in rehabilitating the bill market and the exchanges.

(ii) *Was there Hoarding owing to War ?—*

(A) *By Banks.*—In the initial stages of the crisis some of the Joint Stock Banks unfortunately attempted to hoard their gold stocks at a time when the public wanted gold for holiday requirements. They paid out Bank of England notes instead of gold. This action caused a large number of people to whom notes had been paid to take them to the Bank of England to change them into gold which was required for holiday purposes. According to Sir R. H. Inglis Palgrave, this encashment of bank notes and so-called "run on the Bank,"

would have passed unnoticed "had not the access to the Bank been rendered difficult by the fact that since they were strengthening the ceiling of their vaults, what would have been a throng was magnified into a crowd. Some people to enjoy the entertainment went to cash £5 notes." Mr. Gibson observes that the other banks during the week ending 5th August withdrew large amounts of gold and notes from the Bank of England, where the Reserve fell during this week from £26,875,194 to £9,966,649—a difference of nearly £17,000,000.

(B) *By the Public*.—It is pleasing to record that, with a few ignominious exceptions, there was practically no hoarding of gold by the public. Since the outbreak of the war, however, there has been a gradual internal absorption of gold, the Bank of England having lost to provincial circulation the very large amount of £21,936,000 in gold between 29th July, 1914, and 28th July, 1915. This absorption of gold must be considered as serious in view of the fact that the Treasury Notes outstanding on 28th July amounted to £45,387,000. These notes have been absorbed by home circulation since the outbreak of war, and should have displaced approximately their equivalent in gold. The Bank of England notes in circulation have also increased since 29th July, 1914, by £3,825,000. Therefore, the total absorption of additional currency by the country since 29th July, 1914, has been £71,148,000. Doubtless the holding of additional currency stores by the banks, accounts for a large part of the absorption, but it is impossible to say how much, and some of the outflow is undoubtedly due to the increased currency requirements consequent on the extensive military mobilisation and the increased prices of commodities. Against the Treasury Notes outstanding on 28th July, 1915, the Government held £28,500,000 in gold coin and bullion, which amount, however, has been accumulated out of gold received from abroad since the commencement of the crisis, and has not been displaced from home circulation.

If the public were hoarding gold to anything like the extent of £50,000,000 to £60,000,000, one would naturally expect the Savings Banks to have experienced an abnormal amount of withdrawals since the commencement of the crisis. The reports, however, of the Savings Banks for the year 1914 proved, almost without exception, how trivial had been the influence of the crisis on their

accumulated funds, the main influence exerted having been a slight check to new business.

There is evidence that the Joint Stock Banks have increased their reserves of currency since the commencement of the war, because their cash reserves have considerably increased. They have not necessarily done so, however, for the purposes of hoarding. They require additional currency to support their vastly increased deposit liabilities. By their subscriptions of £100,000,000 to the first War Loan they indirectly created credits to a similar amount, and their subscriptions of about £200,000,000 to the second Loan will also reflect itself in a further addition of about £200,000,000 to their credit balances by the end of the year, provided in the meantime they do not sell any of their investments to the public. Sir R. H. Inglis Palgrave writes: "There has been, in fact, very little hoarding on the part of the public recently, far less than I remember took place during the panic of 1866. That some hoarding had taken place is clear from amounts in gold which have been produced in connection with payments for the new 4½ per cent. War Loan, but there is no evidence as to the date when these hoards were made. There are always people who will hoard." Another correspondent suggests a reason for the absence of hoarding by the public—the "war measures" were put into operation before the banks were reopened after *this* country entered the fray. He continues: "Had not special measures been taken to prevent hoarding—such as the Moratorium and the special appeal to the patriotism of the public—I feel sure that hoarding would have taken place on a scale hitherto unknown. What produces hoarding is panic; and if the Government had not prolonged the August Bank Holiday as they did, the panic that set in on the outbreak of hostilities between Germany and France and Russia would have become so violent that the whole of commercial England would have become bankrupt. The fact is the Government did not give 'hoarding' a real chance."

(iii) *Emergency Measures to Meet the Need for Currency.*—With regard to the Emergency Measures taken to meet the immediate need for currency, the most important step taken by the Government was the issue of Currency or Treasury Notes. The reason for this Note issue was that on the outbreak of war the banks feared a run on their deposits, and knew that they had not sufficient

legal tender to meet possible demands. Their other resources were also solidified, and they felt that if they parted with considerable sums in gold the public might hoard it until after the war. There was also some apprehension that the supply of the circulating medium for ordinary business purposes might be insufficient. It was therefore resolved that small notes of £1 and 10s. each should be issued by the Treasury. These notes were made legal tender—that is to say, they might be employed in paying a debt exactly in the same way as gold and silver coin or Bank of England notes can be used for that purpose. Arrangements were made for cashing the Treasury Notes in specie on demand at the Bank of England, and we learn from the Bank that the exchange of Currency Notes for gold is a matter of daily occurrence there, and, in fact, has been so since the notes were first issued. No mention, however, of the fact that Currency Notes are payable in gold at the Bank of England has appeared on any of the notes which have so far been issued.

§ The issue of these notes was a bold experiment ; some difference of opinion prevails as to the wisdom of the step, and there is more doubt as to the advisability of continuing, and possibly of increasing, the amount of Government notes in circulation. Some of the objections were referred to by Mr. Huth Jackson in his presidential address to the Institute of Bankers, in November, 1910, and are now endorsed by Sir Inglis Palgrave.¹ Mr. Huth Jackson quoted on this occasion from the works of Mr. Conant, who is a recognised authority on Banking and was the United States Delegate at The Hague Conference, and who wrote in his *History of Modern Banks*, as follows :

“ A Government paper currency has rarely been issued to promote the convenience of commerce, and has seldom contributed to that end. Experience, as well as theory, has proved that Government paper money is essentially different in character from banking paper, and opens a Pandora's box of evil for every nation which uses it. The difference between a Government paper currency and bank notes is not one of experience or accident merely ; it is a difference which is fundamental. Banking paper is based on

¹ Part of the statements made here were given by Sir Inglis Palgrave in an article on the “ Government Note-Issue ” in the *Bankers' Magazine* for April, 1915, and are repeated with the permission of the Editor.

business transactions, and is limited by their demands ; Government paper is based upon the will of the State, and is limited only by its necessities. The almost invariable rule of Government paper issues is that one begets another, until the entire volume exceeds the legitimate demands of business, upsets values, and goes beyond the reach of restriction of the metallic standard. . . . Even a limited issue of paper is maintained at par by a Government with much greater difficulty than by a well regulated bank. The reason is fundamental. The Government has no quick assets. It is not wealth in the abstract that currency must represent, but quickly negotiable wealth. The Government has only two resources (beyond the cash in hand)—the pledge of public property and the power of taxation. The peculiar strength of a banking currency lies in the enormous mass of quick assets behind its demand liabilities."

The objection made by Mr. Huth Jackson is so strong that it ought really to be decisive as to the continuance of the Currency Notes. Should there be any doubt on the subject, there are several practical objections which ought to be remembered. One of these is the great risk of forgery. Another is the question whether they may not be a heavy expense to the State. A third objection is that a very large issue of them would have an effect upon prices. The amount of these notes issued is not, like the notes of a bank, payable in specie on demand, dependent upon the requirements of business, but it depends on the wants of the Government, which are completely different. The Currency Notes are made payable at the Bank, and, of course, they will be paid by the Government eventually—but, as mentioned before, the fact that they are payable at the Bank is not stated on them. There is, hence—as the Currency Notes are not practically subject to the constant inspection at the issuing bank which ordinary notes payable in specie on demand are—a much greater risk of forgery. (We may add that a constant system of "exchange" for the small notes of the issuing banks in Scotland and Ireland assists in obtaining the same results in their case.)

Again, small notes, as those for 20s. and 10s., circulate among a much less educated class than the larger notes of the Bank of England do, and they thus rapidly become soiled, in which state it is almost impossible for any person to decide whether they are

genuine or not. The first notes were very poorly executed. To render them safer from forgery, a better design for the notes has since been employed, but the facilities for copying and reproducing any design by various processes are very considerable and no great dependence can be placed on the goodness of the design for preventing forgery. Sir Inglis Palgrave says: "Ready payment in coin on demand gives the best security against this. In the United Kingdom during the period of the suspension of specie payments at the beginning of the last century,¹ the £1 notes of the Bank of England were largely forged, while forgeries were far less frequent among the bank notes of the higher denominations."

Sir Inglis here quotes a table showing the actual numbers of the forgeries in each denomination of notes over a series of years: "After the war between France and Germany in 1870, notes as small as five francs were issued by the Bank of France. These were frequently forged. The Bank of France thought it desirable to pay all their notes, whether genuine or otherwise, in order to avoid the inconvenience which refusal to pay any of their notes might have produced. This I remembered hearing at the time. To be quite sure, I inquired at the Bank of France last year, while the business of the bank was being carried on at Bordeaux, whether I was correct, and the Secretary of the bank assured me that the facts were as I have stated. He added that great precautions were taken and that the eventual loss was but small."

There is hardly any need to enlarge on the great disadvantages which arise from forgery in the notes which form part of the general circulation of a country. Whether extensive forgeries of the notes are in fact taking place we do not know, and one of our correspondents says that "all known coiners not in prison are now engaged in the manufacture of munitions." Besides these difficulties, which are inseparable from an issue of small notes, there is also the practical question whether there may not be an expense to the State from the issue of the Currency Notes. The figures on 26th August, 1915, are as shown on the next page.

¹ The suspension of specie payments lasted from the year 1797 to 1821. See article on "Suspension of Specie Payments," Palgrave's *Dictionary of Political Economy*, Vol. III, p. 501.

Currency Note Issue.
Statement of 26th August, 1915.

	£
Scottish and Irish Banks of Issue	—
Other Bankers	1,204,000
Trustee Savings Banks	469,000
Currency Note Redemption Account—	
Gold Coin and Bullion	28,500,000
Government Securities	9,586,000
Balance at the Bank of England	14,750,000
	<hr/>
	£54,509,000

Proportion of gold to notes outstanding, 52·6 per cent.

This statement shows that at the end of August, 1915, about £54,500,000 of Currency Notes were in circulation, that there was held against them £28,500,000 in gold, with about £9,600,000 Government securities, and that there was further a balance of £14,750,000 at the Bank of England.

The Currency Notes issue is thus amply secured, but can any profit arise to the Treasury from the issue? We must first estimate the expenses. The best basis that we can find for estimating the cost at which the Treasury Note issue is being worked is found in the Report of the Postmaster-General. In his Report for 1903, the net expenditure of the Post Office Savings Bank Department is stated as "representing an average cost per transaction of 5·93d." Professor Dicksee maintains that there is nothing in common between transactions of this description and transactions in the Savings Bank Department. "If there were," he adds, "it would be a simple matter for any competent person with up-to-date ideas to reduce the costs of the Post Office Savings Bank to a maximum of 2d. per transaction." At present there are no statistics available to show whether the cost of Treasury Notes equals or approaches the cost of transactions in the Post Office Savings Bank. But there is a statement in the evidence taken before the Select Committee of the House of Commons on Banks of Issue in 1875, which shows that the cost of a £1 note circulation, kept in a reasonable condition, could not be much less than 1½d. per annum for every note issued. This would be a much smaller expense than that shown in the estimate based on the expenditure at the Post Office, but, as more than £93,000,000 of Currency Notes had been cancelled up to August, 1915, the expense of working the

issue must be very large, and a profit can hardly be looked for. Nor is the amount of gold acquired for the Bank of England by the Currency Note issue really important considering the large reserves which must always be held against it.

On the other hand, the experiences of the Scottish and Irish Banks of Issue shows that an issue of £1 notes can be maintained at comparatively small cost, and that in these countries notes of £1 circulate with great freedom, even in some cases being preferred to gold. In foreign countries, too, Governments have thought it worth while to issue notes of far lower value than 10s. For years Italy issued notes of one lira (9½d.), and France is now issuing one-franc notes, and even 50-centime notes are not unknown. Further, an allowance must be made for the fact that gold coin withdrawn from active circulation is, for the time being, protected from wear. Hitherto, the Government has accepted responsibility for the loss in weight of gold coinage, and the stoppage of this loss should far outbalance the cost of printing notes.

(iv) *The Extent to which these Measures were Effective, Necessary, or Desirable.*—Our fourth question clearly invites a difference of opinion. We have already explained the various Emergency Measures, and in the process we have criticised them where criticism seemed to be required. Consequently, we say nothing further about them here, but in order to place on record the objections which may possibly be urged against them, we print Mr. A. H. Gibson's summary.

The measures enumerated above restored confidence among the banks, who had standing over them the possibility of a general run from their depositors at a time when they were unable to convert any large part of their resources into legal tender currency. For the rapid restoration of confidence among the banks the Government measures must be considered as having been very effective.

In the absence of legislation providing that banking deposits over a certain amount should not be withdrawable without a certain notice first being given by the depositor, some measures of protection to banks were necessary in order to restore confidence among the banks. So far as the public were concerned, the experience of the banks has since shown that the protective measures enumerated were unnecessary. If there had been no extension of the Bank

Holiday, and the banks had not refused to pay out gold to their depositors in the ordinary course of business, there is no reason to think that gold withdrawals from the banks would have been on a very abnormal scale. There would possibly have been a few extra millions paid out during August, but the drain could easily have been met without much effect on current stocks.

The measures enumerated were not desirable for many reasons :

(1) They tended to destroy confidence among the public, whilst admittedly creating confidence amongst the banks.

(2) The old proved banking maxims that "the best way to restore confidence among depositors is to pay out smilingly in full the demands of any uneasy depositors," and "every restriction on gold going out acts as a restriction on its coming in," were evidently early forgotten by the Government and the banks.

(3) The measures caused a loss of confidence in the banks by certain people who can never be expected to understand the machinery of finance. It will be many years before confidence in the banks is fully restored.

(4) There is reason to believe that the more or less forcible issue of Treasury Notes on the public by the banks is one cause of the continuous absorption of gold by the provinces, the public, on account of their preference for gold, showing a tendency to hoard any gold that is paid out to them. The available evidence is that the issue of Treasury Notes has not conserved gold stocks, which was one of the objects of such issue, though in future there should be less public hoarding of gold if the Press makes widespread appeals to patriotism.

(5) The Treasury Notes and Postal Orders have given considerable labour to the banks and the public, not being so easily handled and counted as gold.

(6) Obviously, if it were necessary to use Treasury Notes, they should also have been issued in larger denominations than £1 and 10s., say, for £5, £10, £20, £50, £100, £500, and £1,000. In the event of a run on the banks, it would have been easier for the cashiers to pay out the larger denominations than a greater number of the smaller denominations.

(7) The position of the banks and the fears it engendered during the early days of the crisis have proved that in future there must always be available large stocks of paper emergency currency for

times of crisis, and the banks and other people must be in a position to obtain supplies on pledge of Government securities.

Some criticism has been directed against the closing of the Stock Exchange and the action of some of the Joint Stock Banks in the first days of the crisis. In two respects only had anticipation underestimated the magnitude of the effects of the war on the Money Markets. "The first was the scale on which foreign creditors became unable to meet their obligations to us and the strangling effect of this on our own Money Market; and the second was a lack of courage in the early days of the crisis on the part of our joint stock bankers."¹ The Stock Exchange was closed on Friday, 31st July, and remained closed for the rest of the year. Was this drastic step necessary? Why was it taken? One authority believes it was not necessary, and he throws the blame for it on the banks. He reasons thus: "Immense sums were lent by the banks on security of shares. The amount of the loan for which this security is good is ordinarily calculated by reference to the price at which the shares are quoted in the Official List. If the quotation falls, the bank may require their customer either to reduce the amount he is borrowing from them or to put up additional security." If he does not, they may sell his stocks. If the Stock Exchange had remained open, there would have been a great fall in prices and the banks would have seen their securities dwindling. "There was no guarantee that they would not have taken it into their heads to ruin a number of their customers. The ruin of these would have brought with it the ruin of brokers who had trusted them; and so the trouble would have spread from one class to another."

On the question of Provision for the Suspension of the Bank Act, we may again quote the opinion of Sir Inglis Palgrave: "The experience of the only occasion on which the suspension of the Bank Act has occurred shows that it was fortunate for the trade and credit of the country that this suggestion was not carried out in 1915. During three crises which have occurred since the Bank Act was passed—in 1847, 1857, and 1866, permission was given each time to suspend the Act. On one occasion only, in 1857, did the suspension actually take place. The strict limits of the Act of 1844 were only exceeded in the returns of 18 and 25

¹ *Economic Journal*, September, 1914.

November, 1857.¹ But the impression abroad was very injurious to this country. It was considered that the United Kingdom had become bankrupt. It is quite true that internal anxiety was quieted, but the effect on our foreign trade was very different. As one of the few persons now living who can remember all the crises which have occurred in this country since 1845, I still bear in mind the distress which followed. The crisis of 1866 was, indeed, more terrible in England, but the effect on the Continent in 1857 was very serious. The crisis of 1847 was severe, but the resulting troubles were far less than those of the two later crises. The main reason for this was that in 1847 the difficulties were caused by the too rapid extension of our Railway System, and through speculations that resulted. Great distress was caused at the moment, but the railways remained and were of such service to the trade, industry, and the economic conditions of the country that the troubles were soon overgot."

The power of suspending the Bank Acts of 1844-45 is given in Sections 3 and 4 of the Currency and Bank Notes Act, 1914. The terms are more sweeping than any alteration of the legislation established by Peel that has yet been suggested. Section 3 enacts that not only the Bank of England, but any Scottish or Irish Bank of Issue "may, so far as temporarily authorised by the Treasury, and subject to any conditions attached to that authority, issue notes in excess of any limit fixed by law." Section 4 enacts that "any bank notes issued by a bank of issue in Scotland or Ireland shall be legal tender for a payment of any amount in Scotland or Ireland respectively, and any such bank of issue shall not be under any obligation to pay its notes on demand except at the head office of the bank, and may pay its notes, if thought fit, in currency notes issued under this Act." The power thus given to suspend the Bank Act of 1844 and the Bank Acts of 1845 has not at present been exercised.

The use of postal orders as legal tender was very small. By most people it seems to have been welcomed as an opportunity of securing these convenient means of remittance for small amounts without paying the usual poundage. The facilities may have been useful, and no objection can be taken to the measure. After

¹ Palgrave's *Dictionary of Political Economy*, Vol. I, p. 463, article on "Crises."

a time these facilities were withdrawn, and no one complained. The Moratorium, however, was a very serious innovation in British financial policy, and can be justified only by the great seriousness of the crisis which it was designed to meet. Undoubtedly it was useful in giving people time to think, and to gather together their resources. But as actually constructed by successive Proclamations under the Postponement of Payments Act it showed certain defects, which are well set out by Professor Dicksee. He admits that both the four days' Bank Holiday and the Moratorium were probably necessary in order to give time for reflection and recovery. "But," he continues, "while they may have served to allay panic, and perhaps even to restore confidence, in the nature of things they could not re-establish credit, for credit is a matter of trust, rather than of calculation."

The Moratorium was somewhat unsatisfactory in several ways. It extended the time for the execution of contracts involving the payment of certain kinds of debts, but not the time for the execution of contracts involving the delivery of goods or the rendering of services. But many business houses that were under contract to deliver goods at stated intervals against payment on specified dates, broke their contracts and refused to continue delivery, unless they could be assured that punctual payment would follow in due course. Thus, a want of confidence, which in the first instance was confined to monetary transactions, was extended to dealings in goods. The same difficulty did not arise to any serious extent with regard to the rendering of services, because payments in the nature of wages or salaries were exempted from the provisions of the Moratorium; but those who were under liability to pay out large sums in wages were gravely inconvenienced, and sometimes obliged to suspend operations altogether.

(v) *Effect of Increased Paper Currency on Prices.*—We now come to what is, perhaps, the most controversial of all our questions, that of the effect of Treasury Notes upon prices.

Several distinguished correspondents sent us memoranda which are very hostile to the continuance of these notes. Sir Inglis Palgrave expresses the view which is taken by most economists. He writes thus: "The effect of an increase of the paper currency upon prices, if sufficiently large, is invariably to raise prices, in the same way as any other increase of the circulating medium,

when this is not called for by an increase in the business done. The general increase in prices since the issue of the Treasury Notes may possibly be connected with that issue in some degree. Few things are more difficult to trace than the alteration in prices caused by the issue of a Government paper issue at its first inception. To employ a simile, if I may venture to do so, it is like watching the rise of the tide on a wide beach. Sometimes the waves appear to beat stronger, sometimes they retreat, and it is not till some considerable interval has occurred that the spectator can be certain that the water at his feet is really deeper. Those who will refer to what occurred when the payment of the notes of the Bank of France in specie was suspended after the year 1870, when a vast paper issue was made, and what is taking place now on the Continent from similar causes, will understand this. The effect on prices in this country during the suspension of specie payments early in the last century is another and a good example. The House of Commons even, by passing a Resolution moved by Mr. Vansittart, at that time Chancellor of the Exchequer, denied that the high price of bullion then existing was due to the over-issue of paper, but the effects which followed the resumption of specie payment showed conclusively that prices had been raised very considerably by the great increase of the currency."

The most emphatic condemnation of Treasury Notes is that of Professor Shield Nicholson, who has denounced them in the columns of the *Scotsman*¹ and in the pages of the *Quarterly Review*.² So far as gold is concerned, he argues, we might have expected to see a general fall in prices, since "all the great foreign banks have taken to hoarding their gold, as if that were the height of financial wisdom." Moreover, as the *Economist* index numbers show, the rise in prices since the war "is the more remarkable as it set in in face of a continuous fall for the year preceding the outbreak." The Money Market, he continues, has been "in a state of otiose repletion, and the channels of circulation have been filled to the brim with emergency currency." As a result, the value of our imports has risen, while that of our exports has fallen sharply. "Inflated prices encourage imports and discourage exports." Then there are difficulties at home (e.g., the readjustment of wages

¹ 17th February and 17th March, 1915.

² "The Abandonment of the Gold Standard," April, 1915.

to meet the general rise in prices). "It cannot be denied that there has been a general rise in prices, which is exactly the same thing as a general depreciation of the currency, but many people object to the use of this latter phrase. They prefer to indicate their confusion of thought by saying that the rise in prices is the 'natural' result of the war. On this view, prices in war-time simply rise because 'it is their nature to,' like the dogs that delight to bark and bite, and the opium that has the *virtus dormitiva*, whose nature it is to dull the senses." One object of the note issue was the preservation of our stock of gold, and this policy is attacked by Professor Nicholson: "The maxim that a reserve of gold ought to be accumulated in ordinary times for use in an emergency has been strangely perverted into the maxim that in times of stress gold ought to be hoarded for liberation when the stress has passed."

As we have said, opinion on the merits of the Currency Note issue differ. Mr. Barnard Ellinger welcomes the issue. "I think," he writes, "if the banks made a great effort to pay out Treasury Notes and the public were made to understand that it is desirable that they should use them instead of carrying about gold, not only would more gold flow into the Central Institution but an opportunity would not be lost of accustoming the public to the use of £1 notes, should it be found desirable after the war to retain them as a permanent part of our currency, in order to strengthen our gold reserves. If the notes were withdrawn and instead of them £1 Bank of England notes issued, so made as to be easier to count and handle than the present notes, I think the public would take them willingly, and the tellers at the bank would be equally willing to pass them out, as they would not experience the present difficulty of counting them."

Mr. Gibson denies flatly that Treasury Notes have had any measurable effect in raising prices. He argues that as the home circulation has absorbed over seventy millions of additional currency since the war began, the twenty-six millions of notes not backed by gold have simply helped to fill up the additional requirements. He holds that in this country cheques are so much more used than coin or notes that we have practically lived on a paper currency for some time past. "A far more interesting and important problem," he adds, "is the effect of the 400 millions or so of

additional credit created by the banks themselves subscribing to the two last War Loans and to Treasury Bills. Mr. E. L. Franklin also believes that the issue of Treasury Notes, up to the present, has had no effect in raising prices. The total increase in the circulating currency is not, he thinks, greater than the amount of gold now hoarded by the public.

Mr. D. M. Mason, M.P., on the other hand, holds strongly that the notes ought to be withdrawn as soon as possible. He maintains that the effect of "an abnormal issue of paper currency," whether in bank notes or in Government notes, is to raise prices. With this view, if stress be laid on the word "abnormal," we are inclined to agree. An over-issue, he continues, is less probable in the case of bank notes, as they would be difficult to get into circulation. He sees no objection, however, "to properly qualified banks having the right to issue notes, and provided the notes are made payable in gold on demand, there need be no limit placed upon the issue, as the notes in the event of an excessive issue would probably be at once presented for payment."

Each country is only capable of using a certain amount of currency for its daily and yearly requirements. This currency expands and contracts with the demands made upon it. If there is a surplus of currency and loanable credit in a country, the rate for money falls, and like every other commodity, seeks a better market. The exchanges turn against the country in such a case, and gold flows out until the value of money rises and checks the outflow, and, in turn, tends to attract capital back to this country again. Mr. Mason quotes a letter from the *Economist* which compares the note circulation of the principal banks of Europe in March, 1914, with the circulation a year later. (See next page.)

The table, we may observe, makes no allowance for the large increase in the gold stocks of all the banks mentioned. So far as the Bank of England is concerned, Mr. Franklin, writing on 13th August, says: "Comparing the gold position to-day with that of 13th August, 1914, I notice that the entire note circulation could be redeemed in gold, and the Bank would still have the same amount of gold in its vaults as this time last year, namely, 32 millions."

Coming to the second part of the question as to "what provision, if any, should be made for the withdrawal of Treasury Notes," we find it more easy to agree upon a recommendation, and this is

—	Note Circulation in March, 1914.	Note Circulation in March, 1915.	Increase in 1915.
Bank of England . .	£ 28,500,000	£ 34,000,000	£ 5,500,000
Treasury Notes . .	—	38,000,000	38,000,000
Total . .	28,500,000	72,000,000	43,500,000
Bank of France . .	232,000,000	444,000,000	212,000,000
Imperial Bank of Germany . .	90,000,000	247,000,000	157,000,000
Imperial Bank of Russia . .	162,000,000	312,000,000 (estimated)	150,000,000
Austro-Hungarian Bank	89,000,000	178,000,000	89,000,000
Grand Total .	601,500,000	1,253,000,000	651,500,000

that the Treasury Notes should be gradually withdrawn. If paper money for sovereigns and half-sovereigns is still required, this should be provided by Bank of England notes of these denominations.¹ From this recommendation Mr. Franklin dissents, suggesting as an alternative that the issue should be adjusted until each note is balanced by its equivalent in "ear-marked" gold. "By this method the amount of circulating currency would not be increased, while the Government would have control of a large stock of gold." We are by no means sure, however, that it is wise to leave a large stock of gold in the hands of a Government Department. A Chancellor of the Exchequer in difficulties might be tempted to raid it.

¹ Sir Inglis Palgrave makes an interesting, if somewhat revolutionary, suggestion in this connection, namely, that the Bank should be allowed to issue its notes against suitable business securities. "These might be first-rate mercantile bills and floating securities of that class, the requirements of the Bank Act as to the holding of gold coin and bullion against the notes issued beyond the fixed limit of £18,450,000, being suspended for the time while the Bank was directed to pay its notes in specie. If the Bank of England were left to its own judgment in the matter, as it was before the Act of 1844 was passed, there ought to be no anxiety that it would fail to provide for cashing its notes and meeting the demands on it in specie. The rate of discount might at times have to be raised to a high point if the foreign exchanges were much against this country, but this, as well as the arrangements needed for the maintenance of payments in specie, might safely be left to the management of the Bank of England." As an alternative Sir Inglis suggests that the other banks in England and Wales, whose rights of issuing notes have been gradually cut down since 1844, should be allowed, under proper safeguards, to make a new issue of small notes.

IV.—WAR TAXATION.

What Proportion should be Maintained between the Amount Borrowed for the War and the Amount Raised by Taxation.—On this question it was not probable that the Conference would come to a unanimous conclusion. The general opinion is that no *fixed* proportion can be maintained in the case of a war which is not yet within sight of its end and has already cost a sum surpassing that spent in any previous war.¹ At the same time, the Conference has no hesitation in agreeing with Professor Bastable's opinion that "the need for immediate taxation is great."

While it is difficult, and perhaps ultimately impossible, to discover any principle upon which the cost of a war should be divided between money raised by borrowing and money raised by taxation, nevertheless, since all loans, even when raised by national Governments, should be regarded as being repayable at some time in the future, the real choice is between paying by present taxation and paying by future taxation. By a curious irony, the Imperial Government has found itself forced, by stress of circumstances, to adopt the rule, which it has imposed, amidst so many protests, on our local governing bodies—that loans shall be repaid at a fixed and early date. It is probable, no doubt, that the Government would have preferred the unilateral option of Consols (*i.e.*, of repayment at its option only). But the disastrous experience of Pitt, who issued his loans at a ruinous discount, and the risk of a refusal on the part of investors to subscribe to an irredeemable loan, have led to the adoption of a sounder policy. It is no doubt true, as Mr. Gibson suggests, that one reason for the early date of redemption, at the Government's option, is to secure the possibility of conversion to a lower rate of interest if the War Loan stands above par.

In the case of a local authority, Parliament permits borrowing only for purposes which have a permanent value, such as the purchase of property or the building of a Town Hall, and it insists, in every instance, that a sinking fund shall wipe out the whole loan before, say, the Town Hall will need rebuilding. Thus, at the end

¹ Mr. Sidney Webb protests strongly against the attempt to assign any ratio between loans and taxes. "No such *ratio*," he writes, "can have any relation to the *amount* which it is economically desirable and practicable to raise by taxation."

of the period the town possesses its Hall free of debt. Consequently, the local sinking fund need be fixed at only the small percentage required to wipe out the debt within the forty or fifty years specified by Parliament. But in the case of money borrowed by a Government for a war, the conditions are very different. The money has been spent, and there is no property or work of permanent value to show for it; it has gone like the money which a man borrows to keep his home going during an illness, not like the money which he sinks in building himself a house. Consequently, a greater effort must be made to pay for it out of income rather than by borrowing. No doubt, when a successful belligerent gets an indemnity or an increase of territory, this is an asset to be reckoned against the new debt of the war; or, to continue our analogy, it is like a firm borrowing to buy the site for a new building. Clearly the smaller the war expenditure the larger the proportion which should be raised by immediate taxation. Mr. Gladstone added very little to the National Debt as a result of the Crimean War, though he increased taxation immediately. During the Boer War, laxer principles prevailed.

Now, however, with the rate of expenditure so enormously increased beyond anything known or thought of even fifteen years ago, precedents give little help, for the proportion raised under Mr. Gladstone is clearly out of the question. Nevertheless, some principle or proportion should be found. Interest on the War Loan must be met out of taxation: there can be no two opinions here. Two further annual charges must be faced, though both should gradually decrease, viz., Sinking Fund and Pensions for the disabled and for widows and dependents of the slain. These charges, like that for the interest on the War Loans, naturally depend upon the length of the war itself, but all three charges will grow with each month that the war lasts. Another thing grows, and that is, the rate of interest which has to be paid for each successive loan. The earliest batch of Treasury Bills was subscribed three times over at an average rate of discount of $3\frac{5}{8}$ per cent.; the first War Loan, issued on a basis of between $3\frac{3}{4}$ and 4 per cent., was subscribed with difficulty; and the second Loan required much advertising and appeals to patriotism before it could be floated at $4\frac{1}{2}$. And now, from Mr. McKenna's promise to accept $4\frac{1}{2}$ per cent. War Loan stock as payment for a third War Loan, if it should

have to be issued, we must face the possibility of a debt at over $4\frac{1}{2}$ per cent., running far beyond a thousand millions.

Then it is a well-known fact that borrowed money is spent more extravagantly than income, whether by Governments or by individuals. Finally, during a war, money is inevitably spent lavishly and everyone connected with war industries earns higher wages than in times of peace. Consequently, the nation as a whole can bear more taxation now than it will be able to bear when peace comes and the war industries become slack again. Yet no fresh taxation was imposed by the 1915-16 Budget, and even the Interim Budget of November, 1914, had only doubled the income tax and increased the beer and tea duties ; a rough-and-ready plan which was excusable at the moment, but is indefensible as a permanent method of raising money for the war.

Detailed proposals for raising further revenue might lead the Conference into controversial topics, and have accordingly been excluded from its "Reference." Therefore, we cannot endorse the fiscal proposals made by the Bankers' deputation to the Prime Minister and the Chancellor of the Exchequer, which are now supported by Mr. Barnard Ellinger. His argument runs thus :

"If the amount of indirect taxation raised through existing Customs duties were very considerably increased, so long as the Exchequer were receiving the same total amount of revenue, any diminution of import due to the increased rate of taxation would, at the present time, be of great advantage to the nation, in so far as it would diminish the total sum of our imports. If the excessive taxation did not seriously diminish the imports, the Exchequer would, of course, gain in revenue. An increase of indirect taxation in the shape of Excise duties is also desirable, and no great harm could be done at the present time by driving this taxation up to or near a point at which it ceased to be productive. The Exchequer would get at least the same revenue as hitherto, and there would be a growth of saving available for loans, or, alternatively, the Government would get increased revenue."

Direct taxation raises less controversy, and we think that the income tax might be raised beyond its nominal rate of 2s. 6d., especially if its graduation were improved and if it were extended, necessarily at a lower rate of charge, to a much greater number of taxpayers. Two considerations, however, must be borne in mind :

a greatly increased tax (1) adds to the risk of false declarations or concealments of income, and (2) may deprive the Government of subscriptions to its loans. In order to obtain some definite estimate of the total cost of the war, it is necessary to assume that it will end on a certain date. Mr. Joseph Kitchin, who has furnished the Conference with a very valuable and exhaustive memorandum, assumes merely for purposes of calculation that hostilities will continue until the end of November next, and that a further three or four months will be taken up by negotiations and the final ratification, during which expenditure will be on a heavy, though on a reduced, scale. On this assumption he works out the cost of the war as follows: "Exclusive of (1) some £200,000,000 lent to the Dominions and our Allies, which will in due course be repayable; (2) some £30,000,000 spent in the purchase of wheat, meat, sugar, and other commodities, which may be re-sold at cost; and (3) £80,000,000 per annum representing the normal cost (1914-15 Budget) of our Army and Navy under peace conditions, the direct cost of the war to the United Kingdom may be put as follows:

	Direct Cost of War.	Extra Revenue Raised.		
		Income and Super-tax.	Excise and Customs.	Total.
	£ £	£	£	£
4 months to end November, 1914	100,000,000			
do. March 1915	180,000,000			
	280,000,000	12,800,000	6,000,000	18,200,000
do. July, 1915	240,000,000			
do. Nov., 1915	280,000,000			
do. Mar., 1916 (armistice period)	150,000,000			
	670,000,000	46,400,000	20,200,000	61,800,000
Interest on War Debt to 31st March, 1916.	50,000,000	—	—	—
	£1,000,000,000	59,200,000	26,200,000	80,000,000

"The extra revenue raised is judged by comparing the actual revenue of 1914-15 and the Budget for 1915-16 with the first Budget (prepared under peace conditions) for 1914-15. The

figures of the Budget for 1915-16 are taken notwithstanding the dropping of the increased beer, spirit, and wine duties included in it, since the revenue from these sources is not likely to be affected ; indeed, Lord Lansdowne gave figures in the House of Lords on 6th July indicating that a higher revenue than that assumed in the Budget will be received. The total of extra revenue shown (which includes non-tax revenue) is lower than the sum of the two previous columns because of loss of other revenue, particularly from stamps. The foregoing table shows that, on the assumptions made, only some 8 per cent. of the direct cost of the war will have been raised by increased revenue during the sixteen months from 1st December, 1914, to 31st March next, and, indeed, only $6\frac{1}{2}$ per cent. if the cost of after-war pensions and allowances is also taken into account.

“ Apart from Treasury Bills and the meagre amount of increased taxation, the cost of the war is being raised on two War Loans. The $3\frac{1}{2}$ per cent. War Loan realised £331,000,000. The new $4\frac{1}{2}$ per cent. War Loan has realised a little over £600,000,000. Pending definite figures as to conversions of old loans (which cannot be known till November), a forecast of the Treasury of 21st June may be adopted. According to this forecast, £250,000,000 of Consols and £200,000,000 of the War Loan 1925-28 may be converted, leading, with the £600,000,000 of new money, to the following result :

—	New Stock received on conversion.	New Subscrip- tions.	Total of New Stock issued.
To holders of Consols.	£167,000,000	£333,000,000	£500,000,000
To holders of War Loan, 1925-28	200,000,000	210,000,000	400,000,000
Subscriptions apart from conver- sions	—	57,000,000	57,000,000
	<u>£367,000,000</u>	<u>£600,000,000</u>	<u>£957,000,000</u>

“ This would mean that the assumed cost of the war will (with the exceptions already given) have been raised as follows :

Proceeds of £350,000,000 War Loan, 1925-28	£331,000,000
„ „ War Loan, 1925-45	600,000,000
Raised out of revenue in the fiscal years 1914-15 and 1915-16	80,000,000
	<u>£1,011,000,000</u>

“ Assuming for the moment that no further increased taxation comes into force before April next, the picture of the National Debt would be about as follows :

—	Nominal Amount.	Interest per Annum.
4½ per cent. War Loan, 1925-45 . . .	£957,000,000	£43,000,000
3½ per cent. War Loan, 1925-28 . . .	150,000,000	5,000,000
Old National Debt (mainly 2½ per cent. Consols)	390,000,000	12,000,000
Total	£1,497,000,000	£60,000,000

“ This means an increase of £860,000,000 in the National Debt. Of the £1,497,000,000 rather over £1,100,000,000 will be redeemable, while practically all of the old National Debt of £640,000,000 was irredeemable and subject only to purchase in the market, though there was also the alternative of redemption in each conversion scheme. The higher rates of interest on the War Loans will continue until at least 1925, when the 4½ per cent. Loan may be converted at a lower rate of interest. Assuming that the £1,100,000,000 of redeemable debt is redeemed by a Sinking Fund of a fixed annual amount for interest and redemption combined, the annual service would be raised from £48,000,000 to £55,000,000, if the period of redemption is spread over fifty years. This means a total service, including interest and Sinking Fund of the old debt, of, say £70,000,000, or, better, £75,000,000 per annum, which compares with £25,000,000 to £30,000,000 in the few years preceding 1914-15. To this must be added the cost of after-war pensions and allowances, say £15,000,000 per annum.

“ Some idea of what this means can be gathered by comparing the actual figures for the national revenue and expenditure of 1907-08 (*i.e.*, before the Super-tax, Old Age Pensions, and National Insurance were introduced, and when income tax was 1s. in the £), the first Budget of 1914-15 (representing normal peace figures and including a proposed income tax rate of 1s. 4d. in the £), and a year after the war, the last-mentioned reckoned on normal taxation only. (See next page.)

	1907-08 Actual.	1914-15 Budget.	A year in the near future. ¹
<i>Expenditure.</i>			
Army and Navy	£58,200,000	£80,400,000	£100,000,000
National Debt Service	29,500,000	23,500,000	75,000,000
War Pensions and Allowances	—	—	15,000,000
Social Programme (Old-Age Pen- sions and National Insurance)	—	21,000,000	25,000,000
Education and other Civil Services	35,400,000	42,500,000	50,000,000
Post Office, etc.	28,700,000	37,600,000	40,000,000
Total Expenditure	£151,800,000	£205,000,000	£305,000,000
<i>Revenue.</i>			
Income (and Super) Tax	£32,400,000	£56,600,000	£40,000,000
Estate Duties	19,100,000	28,800,000	25,000,000
Stamps, Land Tax, House Duty, etc.	10,600,000	13,300,000	10,000,000
Total Direct Taxation	£62,100,000	£98,700,000	£75,000,000
Customs and Excise	68,200,000	75,000,000	75,000,000
Total Taxation	£130,300,000	£173,700,000	£150,000,000
Post Office and other non-tax Revenue	26,200,000	34,800,000	30,000,000
Total Revenue	£156,500,000	£208,500,000	£180,000,000

“ The figures in the last column are set down to give a picture of what in all probability will have to be faced. They are based on a normal peace basis a few years hence. Neither a reduction of armaments nor the adoption of Universal Military Service is assumed, but just the normal increase of £4,000,000 per annum for the Army and Navy to which we became accustomed before the war. The principal income tax rate is taken at 1s. 2d. in the £, being the general rate ruling for some years before the war, and the other revenue items are based on present taxation and on the assumption that the reduction caused by the after-effects of the war will be moderate. Thus, on figures which are moderately estimated, and which may easily prove too favourable, there will—on the basis of normal taxation and a normal income tax at 1s. 2d.—be an annual deficit of £125,000,000 on an expenditure of £305,000,000, and half of this deficit will be due to the increased

¹ For these figures Mr. Kitchin accepts sole responsibility.

debt service plus pensions and allowances. A deficit of £125,000,000 would mean that taxation would have to be increased to £275,000,000 (*i.e.* by 58 per cent., over the £173,700,000 of the 1914-15 Budget). This result, it may be well to reiterate, is based on the assumption that hostilities will come to an end after sixteen months of war, and the £200,000,000 or so to be lent to our Allies and the Dominions is also ignored. If the war lasts beyond November—and any Chancellor of the Exchequer must budget for its doing so—the burden to be faced will be still higher.

“ The following figures, which can only pretend to be very rough, contrast the assumed financial result to the United Kingdom of the present war with that of earlier wars :

—	Napoleonic Wars, 1793-1815. ¹	Crimean War, 1854-1856.	Boer War, 1899-1902.	Present War, 1914- ? (Estimated).
Direct cost of war to United Kingdom	£831,000,000	£67,500,000	£211,000,000	£1,000,000,000
Raised by National Debt	£440,000,000	£32,000,000	£143,000,000	£920,000,000
Proportion	53%	47½%	68%	92%
Proportion raised out of revenue during war	47%	52½%	32%	8%
Portion of cost raised annually out of revenue during war	£19,500,000	£13,500,000	£25,000,000	£48,000,000
Annual Debt service per head per annum before and after war	13/0-35/0	22/0-23/0	11/6-13/6	10/6-31/9
Annual taxation per head per annum before and after war	20/0-70/0	42/0-48/0	44/3-55/6	75/6-116/-
National income per annum before and after war	£250-£350 millions	£500-£550 millions	£1,600-£1,800 millions	£2,250 millions
Proportion of National income paid in taxes before and after war	6%-20%	11%-12%	5½%-6½%	7¼%-12¼%

“ The proportion at present raised out of taxation (most of it merely covering current interest on War Loans) is far lower than in previous wars, but this is perhaps not a fair way of looking at the matter, as the amount it is possible to raise out of revenue must be proportioned, not to the cost of the war so much as to national income. The last line in the foregoing table is, therefore,

¹ Professor Bastable does not accept these figures for the Napoleonic Wars, see p. 242.

the one of most significance. Obviously, we should be able to pay in taxes a higher proportion in respect of present income of £2,250,000,000 per annum (£49 a head) than could our forefathers in respect of their income of a hundred and twenty and a hundred years ago of £250,000,000 to £350,000,000 per annum (£17 or £18 a head).

"It is not feasible to fix a definite proportion between the amount which should be borrowed for the war and the amount which should be raised by taxation, and it is probably more a matter of first incurring debt and then paying it off rapidly than of meeting a substantial portion of the cost of the war otherwise than by loan. The extra revenue now being raised (£61,800,000 per annum) is insufficient even to meet the estimated increased cost in future of the National Debt plus pensions and allowances (£68,500,000 per annum), and thus in effect we are momentarily raising nothing to meet the direct cost of the war. Though we cannot hope, unless the war lasts an appreciable time longer, to meet any great proportion of the cost of the war while it continues, that is no reason for not raising all that the position permits, and that at once. To borrow instead of taxing now does not pay for the cost of the war, but means that the payment is left to be made with usury for many long years after the war is over. The more that is borrowed, and the longer the borrowing lasts, the heavier the taxation to be faced in the future. The taxation of £275,000,000 per annum (suggested as necessary a few years after the war if the present method of borrowing practically all the cost is continued) will be much heavier if hostilities last beyond November. In any case the present taxation of £235,700,000 (Budget figure for 1915-16) is much below that figure, when beyond question it should already be much above it. Twenty per cent. of our normal national income would be £450,000,000, but there are obviously considerable difficulties in raising such a sum while war goes on, for, in practice, it involves devising new means of taxation, a further increase in the income tax (if its basis is not considerably broadened) being quite insufficient to provide the amount.

"For a time after the war there is likely to be a period of abnormal prosperity, and after that a time of depression is to be anticipated. The first period is put by Mr. Lloyd George at four or five years, but there is too much reason to fear it may be much

shorter—say two or three years. Thus, the greatest chance of lessening the burden which the war will leave behind it, is to be found in the two or three years after peace is declared. It stands to reason that the time to tax heavily and to relieve posterity is much more the time when savings are high by reason of private economies and special war income than when the inevitable period of depression has come; hence taxation should be increased at once and maintained at as great a height as the position will stand, so that some relief may come when it is needed. We have in the United States a good example to follow. After the costly Civil War of 1861-65, the war taxation was unflinchingly kept up until the National Debt was sensibly reduced. Between 1865 and 1880, the Federal Debt fell from £570,000,000 to £400,000,000, in 1881 the Government was able to re-borrow at $3\frac{1}{2}$ per cent., and by 1887 the debt was reduced to one-half of its maximum figure. The adoption of this policy did much to assist in the remarkable recovery of that great country. If we can follow that example and reduce our War Debt to one-half in twenty-two years, we should certainly do so.

“The United Kingdom will probably emerge from this war in a better position than any of the other belligerent countries, none of which seems to be meeting any part of the cost of the war or interest on War Loans out of current revenue. Germany had a pre-war debt of £1,040,000,000, but it was not an almost entirely unproductive debt like ours, for it is fully represented by the value of its State railways, mines, lands, and forests. It is likely to have in addition a War Debt of £1,500,000,000, the annual service of which should approximate to £85,000,000. We have the advantage of the other belligerents, because we are the richest of the countries at war, are more free from disturbance to trade, and have suffered no devastation; but the war will certainly put us in a disadvantageous position as compared with the United States, which will, therefore, have the after-war cream, while we shall have to be content with milk, and the other belligerents with skim-milk.”

Professor Dicksee and Mr. F. W. Hirst believe that the nation is better able to bear heavy taxation during a war than during the years immediately following the conclusion of peace, although the Professor assumes that the taxation is “intelligently applied,

so as to hit those who are benefiting financially from the war." Professor Boyd Dawkins also writes in support of immediate taxation, and urges that special imposts should be levied upon war profits. Sir Edward Brabrook is inclined to recommend further taxation, but regards the question as one of the greatest difficulty: "The test of the propriety of taxation is the ability of the community to bear it, *i.e.*, to bear it without sacrificing all that makes life endurable."

The views of Mr. D. M. Mason coincide in the main with those which we quote later from Professor Bastable. While saying that no *fixed* proportion can be laid down, he would raise as much as possible by taxation. "The advantages of taxation," he writes, "as compared with borrowing consist in this, that taxation comes home more directly to all sections of the community. This fact tends to direct men's minds to the necessity of bringing the war to a close as soon as possible. Loans, on the other hand, deceive the general community by creating for the time being apparently great prosperity with comparatively small hardship. This is brought about by the expenditure of the proceeds of the loans without corresponding high taxation. Another great evil resulting from large loan expenditure is that the added stimulus due to the expenditure creates an abnormal demand for labour. After the war there is a great influx of labour seeking employment and a diminished supply of capital. The result is a great deal of unemployment and misery for the working classes. While loans are, no doubt, necessary for the carrying on of a great war, regard should be given to the state of the money market at home and abroad both before and during the continuance of the war. It is also imperative in time of peace, particularly if there is any probability of war, to practise economy and keep down taxation with a view to a financial reserve for war when it comes."

Mr. Gibson agrees with Mr. Kitchin's view that the best time for materially increased taxation is in the few years immediately after the declaration of peace, but not with the view that a period of depression is a bad time for it. "Trade depression," Mr. Gibson continues, "is just the time when people have large liquid resources, savings are high owing to the reduced cost of living, and investment prices rise through the increased demand for investment. Manufacturers require their liquid capital in times of trade booms, but not

so much in times of depression. Increased taxation from a national standpoint can be better borne in a time of trade depression than in a time of activity and rising prices." From the banker's point of view this is so, for depression always liberates a part of the working capital of many firms which goes temporarily to swell bankers' balances. But such moneys are not easily reached by taxation, and, if they were, the burden would be felt when trade revived through an added scarcity of capital.

Professor Dicksee agrees with other correspondents in holding that "public economy in time of peace is the best possible way of providing a financial reserve against time of war." He continues: "At the risk of embarking upon political rather than economic issues, I should like to put forward the view that we are now being called upon to pay for the experiments of politicians in social reform during the past ten years. The need for both public and private economy is fairly obvious; but public economy has been rendered difficult by the enormous increase in the number of officials employed by Government Departments and local authorities, while private economy is rendered difficult by the heavy taxation—even on a peace footing—of the well-to-do classes, and by the general trend of legislation which seems to have been specially designed to discourage thrift." Referring to Mr. Ellinger's suggestion, Professor Dicksee continues: "I agree that, whatever opinions may be held on the subject of so-called tariff reform, the taxation of imports seems desirable under present conditions, and that, while it may be impossible to foretell whether the effect would be to discourage imports or to produce a revenue, the consequences would be equally desirable in either event. There seems, however, some confusion of thought about the suggestion that an excessive income tax would be undesirable as reducing the amount available for subscription to Government Loans. From the Government point of view, the revenue derived from taxation (of whatsoever kind) is clear gain; whereas Loans call for ultimate repayment, and in the meantime have to carry interest. Accordingly, even supposing the effect anticipated by Mr. Ellinger were in fact produced, the result would not be disadvantageous to the Government, however inconvenient it might be to individuals."

Here we cannot agree entirely with Professor Dicksee's views. If income tax or Estate Duties—or, indeed, direct taxation generally

—is made too heavy, the yield declines proportionately and might even decline absolutely. It cannot be said in advance when an increase in direct taxation would cease to be productive beyond the general *caveat* that there is such a point. Allowance must be made for psychological conditions. At the moment, patriotism would make that limit recede, but as the dangers of war become more remote this influence grows less effective; thus the psychological influence is an argument for early taxation.

Professor Bastable, who has composed his memorandum after reading those written by the other contributors, thinks that the proportion of the tax contribution to the wars of 1793–1815 has been over-estimated. “Instead,” he writes, “of one-half of the cost having been met by taxation, the fact seems to be that little more than one-fourth of the war expenditure was so provided. If the total cost of the war be taken as £830,000,000, the contribution from loans was £600,000,000, and that from taxation £230,000,000. It must, however, be said that the borrowing took place chiefly in the period from 1793 to 1800, and that much greater efforts were made to secure an adequate tax revenue in the later years of the war. There can be no doubt that Pitt’s policy in respect to war finance was affected by two influences, viz., (1) the fear of popular hostility to heavy taxation, and (2) the belief in the magical operation of the Sinking Fund scheme. We have to recognise that earlier use of the income tax would have greatly lightened the financial strain and the accumulation of debt. The financial management of the Crimean War (which was more in the hands of Cornwall Lewis than in those of Gladstone) was more satisfactory. More than half of the cost was met out of tax revenue (£38,000,000 out of the total of £70,000,000), which showed a marked contrast with the French policy in the same war.”

The consideration of the above facts has more than a mere historical interest, and we wish to call special attention to the grave warning of Professor Bastable in the following paragraphs. It is obvious, as he justly says, that “the great lesson to be derived from them is the need of immediate adjustment of the financial system on the outbreak of war. The easy course of borrowing is open to the conclusive objection that it mortgages resources that will soon be needed, while it induces the ordinary citizen to think that he is not called on for any additional effort. But in no previous

case has the necessity for this adjustment been so great as in the present war. Though Pitt bequeathed a heavy burden to the British taxpayer of the nineteenth century, the immense development of British industry as the result of the manufacturing system and Colonial expansion furnished a counterbalancing force. It is not within the range of reasonable probability to hope for anything similar in the twentieth century. Moreover, the call on the "national dividend" is proportionally greater. At no time in the course of the Napoleonic Wars did the borrowings of the State absorb the whole savings of the country. The present rate of war expenditure exceeds threefold the annual savings of the United Kingdom in peace time. The necessary consequence is that there must be either a great growth of "net," as distinguished from "gross" income or that assistance must be obtained from the disposable funds of other countries. To secure the former there will have to be effective inducements to saving in the form of high interest, or compulsory additions to the net revenue forced by the pressure (what Mill somewhere calls "the whip and spur") of taxation.

"On these plain and simple grounds rests the general rule that a great war calls for (1) a large development of existing forms of taxation, and (2) the adoption of any new and feasible forms. Whatever may be said in respect to times of peace, it is certain that productiveness is the one great criterion of war taxes. The nice distinctions of charges on income, on property, on commodities, or on expenditure in general, as well as the problems of just distribution, have to yield to the fundamental consideration of the best way to obtain the maximum return. The only other element of importance is the effect of the tax methods on the productive power of the country, which is itself a branch of future fiscal productiveness. Controversy as to the respective merits of different forms of taxation is really excluded by the urgent necessity of employing *every* effective method. It follows, therefore, that heavily increased taxation of income, especially unearned income (for this is, in fact, a property tax), much higher rates of duties on fiscally productive commodities, and the increase of any minor duties that are likely to prove fruitful should be speedily brought into operation. Nothing but actual trial can show the limit to this use of taxation. We may, however, get some clue by

considering the amount of the national income and the proportion that can be appropriated by the State in case of urgent need.

"If £2,000,000,000 be taken as an under-estimate of the national income, and if we take the view of those financial writers who hold that under emergency pressure 25 per cent. of this income could be secured for the State, it follows that for a limited period of strain £500,000,000 would be the available tax revenue. Bearing in mind the possibility of very large economies on the normal peace outlay, it seems as if vigorous financial administration, sparing no special interests or classes, would supply over £300,000,000 for each year of a limited war period. The tax revenue, just indicated as possible, has evidently to be supplemented by the use of loans. It is, or ought to be, recognised that there are large funds which cannot be brought in by the pressure of the tax-collector, but which will flow in to the Exchequer if the inducement of adequate interest is afforded. We may, perhaps, assume that by this means an amount equal to that gained from taxation is obtainable, year by year, for a war period of several years. The compulsory contribution of the taxpayer is balanced by the voluntary payments of the saving class.

"The general result of the foregoing estimate shows an annual fund of over £700,000,000 available for the cost of war. Taking the total of this cost as approximating towards £1,000,000,000, there remains a sum of over £250,000,000 to be supplied, and here the use of an external loan is manifestly prescribed. By adopting the sound policy of exempting the interest on such a loan from British taxation the raising of the required amount would be facilitated. In addition to the immediate financial relief there would be the important effect on the Foreign Exchanges (it need hardly be said that the United States would be the chief field of contribution) and the beneficial political bearing through the financial interests becoming attached to the side of the borrowing country. As the struggle proceeds, the need of some such arrangement will, I believe, become plainer; but delay will mean heavy financial loss and a greater difficulty in bringing about the needed adjustments."

We are inclined to think that with taxation of over £300,000,000, more than £350,000,000 could be raised by loan, even without trenching (as was done in the Napoleonic Wars with the result

of a suspension of cash payments) upon those bankers' funds which should be kept liquid. But to do that we must call upon our reserve supply of labour and produce more goods, particularly for export. Therefore, the nexus of ideas is public and private economy together with increased production; unless we accomplish the last, we are not making the most of our command of the sea. Probably if war expenditure does not exceed £1,000,000,000 per annum, this country could finance this almost altogether, if not altogether, by taxation and loan, but the national income would need not to fall below £2,000,000,000; we should have to take over 20 per cent. of that, and under the conditions indicated we could lend, say, £450,000,000 per annum, possibly more. But the sacrifice involved in the marginal taxation would be extremely great and the marginal borrowings would be raised at a high cost, thus it would probably be cheaper on the whole to float external loans of moderate amounts. The problem is, in fact, whether there is a balance of advantage in obtaining the marginal £150,000,000 or £200,000,000 of annual war expenditure (in the event of a long war) from British or from external sources.

V.—THE WAR AND THE FOREIGN EXCHANGES

The inquiry into the effect of the war upon the foreign exchanges may conveniently be divided into two periods. The first of these covers the few weeks immediately succeeding the outbreak of war, when the exchanges throughout the world, with hardly an exception, suffered complete disorganisation, from which they gradually recovered as the first shock spent itself and emergency measures were taken to ameliorate the existing financial stress. The second period displays the gradual cumulative effect of war conditions and war expenditure upon the financial relations of each of the combatant nations with its Allies and with the principal neutral countries, an effect which, in the case of this country, has only now begun to attract serious attention.

With regard to the first period, it is beyond doubt that if everyone had kept his head and had correctly gauged the future, the collapse of the exchange machinery could have been avoided. When we remember, however, that the outbreak of war took the financial world by surprise and that there were few precedents

to guide men in such an emergency, it is not surprising that mistakes were made.

Two circumstances have contributed to make London the financial centre of the world: (1) It has been for generations the one absolutely free gold market; and (2) the Bank of England has always been willing to cash its notes in gold to any extent, both for internal use and for export. Thus, the "exchange" of the whole world has centred round the sterling bill, which had come to be regarded, in Mr. Franklin's phrase, as actual "interest-bearing gold." Nearly every foreign State Bank was in the habit of keeping a certain portion of its reserve in sterling bills, which were renewed from time to time as they became due, and only "melted" when and as these banks desired to replenish their stocks of gold. In practically every foreign country, the rate of exchange on London is not reckoned by the value of the unit of currency of that country in pounds, shillings, and pence, but by the number of francs, marks, dollars, etc., necessary to purchase the pound sterling.

The outbreak of war found London the creditor of the world as regards short-dated obligations, and the hurried calling in of such obligations caused a stampede for sterling remittances, which rose to extraordinary prices. The normal rate in New York for London cable transfers is $4.86\frac{1}{2}$ dollars the pound sterling, but in August last year, rates of $6\frac{1}{2}$ dollars were dealt in. In other centres it was impossible for a time to obtain sterling remittances at any price. Many countries forbade the export of gold; arbitrage operations, which in more normal times are used as a lever to redress variations from normal exchange rates, ceased altogether; the creation of finance bills stopped abruptly; the Stock Exchanges of the world were closed. Gradually, however, as men began to view the situation more calmly, the confusion was allayed. Credits which had been abruptly recalled were in many cases renewed. Emergency measures, which are described elsewhere, helped to restore confidence. During the prolonged Bank Holiday, one of the most important problems before the Treasury was the re-establishment of foreign exchange, as it was recognised that, until this was accomplished, it would be quite impossible to carry on the foreign trade of this country. In order to do this, it was necessary in the first instance to re-establish the position of the sterling bill.

For this, two things were necessary—the first to induce accepting houses to continue and to grant legitimate trade credits, and the second to induce banks and discount houses to discount these acceptances when created. For the accepting houses realised that a large and unknown proportion of their acceptances would not be provided for by the drawers at due date, and the discount houses believed that many of the bills bearing their endorsements might not be met by the acceptors. Neither acceptors nor endorsers, therefore, felt themselves justified in adding to their liabilities. “These two apparently insuperable difficulties,” Mr. Franklin writes, “were overcome by the Treasury, with the assistance of the Bank of England, in a manner that will always be recognised as masterly.”

One of these measures had a curious and unexpected effect. The Moratorium enabled foreign customers to postpone the transfer of the sterling to London. “There is no doubt,” Mr. E. F. Davies writes, “that the Moratorium saved enormous sums to foreign countries which were indebted to London, and it also arrested the tremendous rise that was taking place in the foreign exchanges in favour of this country.” The following table shows the rates of exchange current immediately prior to the war and the highest and lowest quotations since:

—	Rate just before War.	First year of War.	
		Lowest.	Highest.
Paris	25·18	24·00	27·60
Amsterdam	12·14	11·70	12·60
Switzerland	25·18	24·00	26·40
Italy	25·30	24·00	29·45
Madrid	26·15	23·85	26·60
Petrograd	96·10	105·00	160·00
Scandinavia	18·25	18·02	19·70
New York	4·88½	4·76	6·50
Rio Janeiro 90 d/s	16d.	11¾d.	nom. 14⅞ ⁷ / ₁₆
Buenos Aires 90 d/s	47¾d.	46⅝d.	49d.

The remarkable jump in the American exchange was due firstly to the general causes already mentioned, and, secondly, as Mr. Davies points out, to the fact that the city of New York found itself obliged to pay off £13,500,000 sterling short notes

maturing in this country at that time. There is no doubt that it would have been a very profitable transaction for English bankers to have renewed those notes, and to have thus kept a certain control over the exchange, but, owing to the manner in which the renewal at that time was proposed, the operation did not meet with general approbation. It would have relieved the situation if the notes had been renewed here, and it would have been a very remunerative investment for anyone foresighted enough to purchase the issue of yearly dollar bills with the exchange round about \$6 to \$6½ and the return that the interest gave them in New York. The action of the Government in stepping in and adjusting the rate of exchange was no doubt good at the time, because it had the effect of restoring normality, although everyone should have known that this country and her Allies would have to buy enormously in the United States of America, which would quickly reduce the exchange rate to its normal level.

Before turning to the second of the periods into which our subject is divided, a few words of explanation are needed. Mr. Metz¹ divides the influences which determine the level of exchange rates into four heads, as follows—

(a) Trade balance, including trade in securities.

(b) Service balance, including interest as remuneration for the service of lending money; in other words, interest on foreign debt held.

(c) Gold shipments.

(d) Credits abroad.

A fifth may be added in some cases, viz., the depreciation of the internal currency of a country, which is reflected in exchange rates between that country and others; and (b) should be interpreted to include the services of our shipping, in which the rise of freights balances, to some extent, the diversion of merchant ships to war purposes.

In normal times (a) and (b) are of primary importance, and (c) and (d) are chiefly used to redress temporary fluctuations in the volume of (a) and (b). In time of peace (a) and (b) tend to an equilibrium or are brought to an equilibrium by the operation of

¹ Mr. S. Metz, who writes from Amsterdam, the chief neutral financial centre, has furnished the Conference with most useful information on the exchanges.

a steady accumulation of foreign investments or foreign indebtedness, according as the nation is an investing country such as the United Kingdom, or a spending country such as our Dominions and Colonies, which are yet in process of development.

The effect of a war such as the present is, however, to disorganise the normal balance of trade and service. Every combatant is compelled to import enormous quantities of war material and food, whilst its own power of production is necessarily seriously impaired by the withdrawal of masses of men from productive enterprise for military purposes. This process is in operation in the case of all the nations now at war, though in the case of some of them it is modified or complicated by the military and naval operations of their opponents, which have restricted foreign trade to its narrowest limits. The result is that the belligerents' imports overshadow their exports, and the rate of exchange tends more and more against such countries and in favour of the principal neutral nations.

Thus, in Germany the premium on dollars had risen in July, 1915, to about $17\frac{1}{2}$ per cent., the Amsterdam rate showing a similar percentage against Germany. In England, exchange rates with neutral countries were irregular, but in no case was the premium more than 3 per cent. In France, at the same date, Dutch currency stood at about $8\frac{1}{2}$ per cent. premium. In Russia, sterling exchange had reached a premium of $54\frac{1}{2}$ per cent., and the Dutch exchange a premium of $58\frac{3}{4}$ per cent. In Amsterdam, the Austrian currency stood at a depreciation of 25 per cent., and the Italian of nearly 18 per cent.

What is the significance of these figures? To what extent do they denote merely a hitch in the machinery of remitting money, and how far, if at all, are they evidence of a depreciation in the value of each country's currency?

None of the belligerents will admit such a depreciation, though few impartial observers, if such can be found, will deny its existence. As regards the English currency, the argument will probably be used that, unlike all the other belligerents, gold is in free circulation, and that its export is not prohibited. But, as Mr. E. L. Franklin points out, "at the present time, notwithstanding that there is no prohibition placed on the export of gold to neutral countries, no bank or banker can be found who will avail himself of the benefits

accruing from such transactions, because it is the general opinion, whether justified or not I will not say, that it is against the interests of this country for gold to leave England so long as other Governments do not allow gold exports from their countries."

The creation of credit has been necessarily profuse, one might almost say necessarily reckless, in this country during the war; wages and prices are on a war basis which can admittedly be only temporary. The result is inflation, which, in the opinion of many, is reflected in an unfavourable rate of exchange. What is to be the remedy? Let us turn back to our summary of the factors which determine the level of exchange rates. From these we may dismiss (*b*) as a potential lever for influencing the rates between this country and others. The interest on debts due from abroad will certainly decline rather than increase during the war, and the withdrawal of men from industry for military purposes prevents any increase in the volume of our services to other nations. The shipment of gold provides a possible palliative for an unfavourable rate, and the criticism is often heard that gold reserves are valueless unless use is made of them. In the present case, however, we are confronted with the difficulty that our stock of gold is wholly inadequate to maintain exchange rates, and that America, to which country most of the gold exported would find its way, has ample supplies of the metal. Mr. Metz, indeed, argues that the export of gold, the sale of securities, and the creation of credits all "suffer from the same evil, that they can be applied only once, and that, once availed of, they weaken rather than strengthen the situation." Mr. Davies, on the other hand, can see only one practical way in which this exchange can be rectified, and that is by "the issue in the States of a large loan, free of income tax, for account of Great Britain. There is not the slightest doubt, in view of American public opinion on Germany's submarine warfare, and the extremely favourable rate of exchange for American investors, that the United States would have subscribed largely to the recent British War Loan, had it not been for one factor, viz., that no provision was made in the terms of the issue to exempt foreign subscribers from the British income tax."

Gold exports, therefore, cannot be relied upon as a permanent way out of our difficulty, and the loss of our small stock might have serious results in weakening confidence both here and abroad.

There remain to us (a) and (d). The trade balance may be permanently affected by the discouragement of imports into this country, by the encouragement of exports, by increased economy of consumption, and by taxation. In speaking of imports and exports, it may be noted that we are not speaking merely of the trade with the United States of America. Our trade is not, and cannot be, divided into compartments, and, though the present difficulty is the exchange rate with America, this rate can be directly influenced by trade transactions with other countries.

In all these directions something has been done by exhortation in the speeches of Cabinet Ministers and from the pulpit, but it may be doubted whether such exhortations have had any but the most superficial effect, nor are they likely to touch more than the fringe of the question. Action of a more direct kind is needed, and such action is not likely to meet with insuperable obstacles. Economy should be enforced as well as preached, and the lesson should be the easier in that Germany has already set an example to the whole world. But when all these palliatives and remedies have been adopted, there is little doubt that there will remain a great deal to be done, and our weapon for this purpose must be the raising of credits abroad. Here, again, the difficulties are merely difficulties of detail and procedure, for no one doubts that the British Government could raise money in the United States on favourable terms.

APPENDIX

THE THIRD WAR LOAN

By D. Drummond Fraser, M.Com.

Is another War Loan necessary? In the event of the continuance of the war till the end of the current financial year, our expenditure will exceed our revenue by not less than £1,000,000,000. Towards this, the second War Loan is raising £600,000,000. To be able to borrow on such a colossal scale, the Government must dominate and attract the savings of the people. The bulk of the proceeds of this borrowing—four-fifths—is expended in this country. Such a vast expenditure stimulates trade. This enlarges the national income and increases the savings of the people.

A Government compulsory loan would intensify the savings by a forced reduction of expenditure, especially with regard to some of our imports. It must be remembered that it is as vital a necessity to reduce our imports as it is to increase our exports.

I suggest that the Government should adopt the banking principle of borrowing *day by day* directly from the people, in a simple and popular form. I propose the issue of Treasury War Bonds in three forms: repayable in three, five, seven, or ten years, at a fixed rate of interest payable half-yearly; the interest for the first half-year to be calculated from the date of investment to the end of the first half-year; a provision to be made on the back of the bonds for a transfer, and a new bond to be issued when the transfer is completed.

1. A Treasury War Bond for £1,000 or any multiple thereof.

2. A Treasury War Bond for £100 or any multiple thereof payable in ten monthly instalments.

3. A Treasury War Bond for £5 or any multiple thereof—scrip vouchers of 5s., 10s., and £1 to the amount of £5 or any multiple of £5, to be accepted as well as cash; holders of bonds not exceeding £100 to receive their interest each half-year without deduction of tax.

In the national interest it is of the utmost importance that the Treasury War Bonds should be taken up by the people direct. It is notorious that the antiquated system of the other two loans, with their "short-time" limit for application and payment, has not attracted the bulk of the people; and, in consequence, the banks have subscribed for a considerable portion of the two War Loans. That, after all, is the money of the people once removed. The bankers' real function is to be the custodian of the people's cash resources—deposits, 60 per cent. of which is employed to liquefy the people's "quick assets"—bills and advances, which fructify wealth. The bankers should finance the Government only temporarily through Treasury Bills over the counter, maturing three, six, nine, or twelve months after date.¹

To the timid banker who sees a dangerous competitor in the Government, I would say that, in spite of the fact that during the first ten months of the war the Government raised

¹ Mr. A. H. Gibson supports this proposal.

£600,000,000 from the first War Loan, Exchequer Bonds, and Treasury Bills, the deposits of the banks actually increased in the same period £200,000,000. I would remind him that since the banks have taken their branches to the homes of the people, the deposits during the present generation have increased 200 per cent. I would further remind him that the business of the country is conducted with an incredible smoothness through the bankers' clearing houses by means of the crossed cheques, the daily average number of which exceeds one million. It was Gladstone who first freed the cheque from its legal disabilities. He was warned by the timid banker of his day that he was placing a very dangerous weapon in the hands of the people. The municipal corporations, the Lancashire cotton mills, etc., have already educated the people with undoubted success in the banking principle of borrowing money day by day direct from the people, for short periods, at a fixed rate of interest. If the bankers, brokers, and financial houses act for the Bank of England, on behalf of the Government, in receiving applications for the Treasury War Bonds, and also in repaying or renewing them, then the Government could obtain the necessary money, when needed, by recurrent popular advertisements in the daily press.

CHAPTER V

ECONOMIC PROBLEMS AFTER THE WAR

BY W. CUNNINGHAM, D.D., F.B.A.,
Archdeacon of Ely

THERE can be no well-grounded forecast of the economic condition of this country after the present war ; it is unprecedented, both from the scale and conditions in which it is waged, and from the manner in which it has been financed. No one can attempt a prediction, save that, whatever the result of the present struggle may be, war is unproductive expenditure. Since we have borrowed largely in order to use that money unproductively, there will be a heavy burden to be borne somewhere ; but where it will press, or on whom it will fall, we cannot estimate with any accuracy. Those who were in the best position to judge in August, 1914, have proved to be quite mistaken in their expectation as to the rate at which German economic resources would be exhausted. All that can be now done is to indicate hopes as to the possibilities of the future.

We have seen an immense outburst of the sense of national duty ; whatever the respective merits of conscription and of voluntary service may be, voluntary service has given a startling proof of the readiness, which exists in all quarters, to undertake a public duty at a great cost in self-sacrifice. We may trust that this spirit will not evaporate when the war is over, but that men will continue to view the affairs of the country in a public spirit, and not with mere reference to their personal interests. Neither in political nor in economic matters is it wise that men should think of nothing but their own interests ; and the *laissez-faire* school, it may be hoped, is dead.

The war has brought the activity of the Government into fresh play ; internal affairs have been administered, or interfered with, in the interest of Government, as was never the case before. There have been experiments in nationalisation of railways, and in the fixing of prices, profits, and wages by the State ; and there

has been a considerable movement towards something of the nature of State-socialism, and national control over the instruments of production. That this increasing activity may be exercised with an increased sense of responsibility, on the part both of officials and of those from whom they derive their power, is profoundly to be hoped ; but in any case it must give rise to an increased sense of the nation as a unit, controlled and administered by itself, and apart from other nationalities. The tendency to cosmopolitanism, which has shown itself in many quarters for some years past, has been rudely checked ; and the recognition of the nation, as a persisting element in human organisation,¹ is much more general than was the case a couple of years ago. It is now recognised that the great issues of the world depend on international agreements, and on the honour of a nation in abiding by agreements, far more than on cosmopolitan sentiments about the brotherhood of humanity.

There is a probability that as a result of this revival of national consciousness, each nation will be more on the guard against the economic danger of being exploited by its neighbours. This is an age of material progress, and there is always a danger that the country, which is economically more advanced, should use its economic strength to push its own advantage, and thus hamper the material development of the more backward countries. This was a policy which Great Britain was able to pursue for a time, in consequence of the extraordinary development of productive power which marked the industrial revolution ; and foreign opinion was not conciliated by the assurance that we were thereby promoting the good of others as well as of our own country. During the last forty years, the success of Germany, in consciously applying science to industrial life, has brought about an extraordinary rapidity of industrial progress ; and she has aimed at using this industrial superiority so as to control the resources of the whole world to her own economic and political advantage. Russia has had a long experience of German encroachment, and there is a widespread suspicion of Germany, which is not wholly racial, but is partly economic.² Expression was given to a similar feeling

¹ The Hon. B. Russell, Suffrage Summer School, *Cambridge Daily News*, 23rd August, 1915.

² B. Ischchanian, *Die ausländ. Elemente in der russischen Volkswirtschaft*, 23.

on the part of Italians, by Sig. Barzilai in a recent speech at Naples.¹ There is likely to be a demand on the part of every nation, weak or strong, to lead its own economic life, as it deems best, and not to be reduced to a state of economic dependence such as Great Britain formerly imposed upon her Colonies.

As the war has been financed so largely by borrowing, there will be a greatly increased burden of interest to be borne annually, and the revenue of the State will need, in consequence, to be greatly increased in the future. It is not clear that there are any directions in which the public would willingly consent to have expenditure cut down, and the only alternative to annual deficits lies in the increase of revenue. Whether this is done by direct taxation or by indirect taxation—and it is probable that both expedients may have to be adopted—the burden of taxation must affect the industry of the country and raise fundamental problems as to the manner in which national prosperity is to be maintained.

I.—It appears to be of the highest importance that these problems should be clearly stated, and should be set in the fullest light ; and I have some misgivings lest the habit of mind, which has been cultivated by English Economists during the last generation, while it serves admirably for inquiries as to isolated questions, is the best for considering broad issues. Production and consumption are both part of the process of economic life, and we may either concentrate attention on production, leaving consumption in the background, or we can put consumption in the forefront,² leaving production in the background. During the last generation, which has been a time of peace, it has seemed sufficient to analyse the whole matter from the point of view of the consumer—cheapness to the consumer, the standard of comfort of various classes of consumers, and so forth ; it has apparently been assumed that production was sure to go on, and that there was certain to be a response to every increase of consumption, as demand would call out supply. But in the stress of war, there has been a new recognition of the importance of production : it has been seen that success depends on the production of munitions, and that it is of importance to organise employment, so that the skill and energy

¹ *Globe*, 27 September, 1915.

² Marshall (1890) *Principles of Economics*, I. 148.

of every individual shall be devoted to the production of what is necessary for the maintenance of economic life. The action of any wage-earners, who have continued to be mainly concerned about their own standard of life and opportunities for consumption, has not met with public approval; there seems to be a general opinion that in time of war, the conditions of national production should have primary consideration. There is a tendency in some quarters to regard economic science as formulated for times of peace, and to treat war as an abnormal condition¹ in which economic principles are temporarily suspended; but, after all, economic doctrine is more reliable if it is based on national experience, both in time of peace and in time of war. It will be well if we approach the problems of national reconstruction after the war, from the point of view of production, and of the manner in which it can be best directed to the national welfare.

The three elements of production are labour, capital, and land. There has been a most gratifying increase of energy in many departments of labour, and there has been a certain transference of employment, so that women have had opportunities opened up which are new to them. The question as to the means of keeping up the vigorous labour, which has characterised war-time, and checking the revival of the easy-going methods of peace, is one on which the continued prosperity of the country depends. The war has also seen a new opportunity for investment by small capitalists; in so far as this continues, the question, between individual capitalists and Socialism of any kind, is likely to be set in a new light, as the importance of the individual in connection with the formation of capital, which the State controls and utilises, is likely to be recognised. We shall certainly need, too, to consider more carefully how we are to make the most of the land; it is here that there is a terrible national waste. The largest portion of the wealth of the country is fixed in the land, but the business of production from the soil has not attracted sufficient circulating capital to allow of cultivation being carried on energetically and efficiently. In all directions I hear of agriculture being defective, because the land is starved for want of capital. The problem as to the best means of attracting capital to the land, and thereby

¹ Compare the speech of Mr. McKenna in reply to Sir A. Mond, House of Commons, 23rd September, 1915.

improving the conditions for the employment of the rural population, ought not to be insuperable, if it is taken in hand with a sense of public spirit.

The strain of life after the war will be greater for each of the elements of production ; there will be more taxation on capital, less easy conditions for labour, and less slackness in the cultivation of land. And here it is needful to pass from economic to political considerations : each of the factors of production may be tempted to evade its share of the burden, and to try to leave it to be borne by others. Capital may seek for investment abroad where it is less burdened by public obligations ; and each of the other factors may be tempted to use its political power in a selfish interest. According to the popular view, landlords have done so in the past with great success ; they controlled a great economic factor, and they possessed exceptional political privilege. Though I believe this charge to be grossly exaggerated, it seems unnecessary to go into the past, and to whitewash either persons or classes, or, rather, to remove the dirt that has stuck to them. But there must be grave anxiety for the future, whether certain classes of working men, whose particular employment gives them a position of great economic strength, will use their political privileges with a view to the advantage of their own class in the present, or whether they are duly mindful of the community in the present, and, therefore, of the future of their own class.

The war may at least make us feel the necessity of pursuing study, so as to cultivate the judgment in matters economic, in order that well-considered opinion may be brought to bear on public affairs. Every one has, of course, a right to his own opinion ; but the controversialist, who does not take the trouble to understand his opponents' views,¹ is not likely to state his own case effectively ; and the man who is so sure he is right, that he really believes those who differ from him are necessarily influenced by dishonest motives, is silly as well as tiresome.² Opinions are not entirely a private concern, since they influence public action in a democratic country, and mistaken opinions may be mischievous. On 5th August, 1914, the *Daily News and Leader* contained the last appeal of those who thought that this nation might be rightly

¹ Compare my *Case against Free Trade*, 139.

² *Guardian*, 23rd November, 1904.

guided in the crisis by a consideration of immediate commercial interests ; but this opinion had been advocated by many leading newspapers within the preceding week, and many eminent persons at Cambridge¹ had pronounced in its favour. Those who are anxious to insist on their intellectual kinship with Germany² seem to take little heed of national security in the long run. It is generally agreed now that this judgment as to the economic interests of this country has been shortsighted ; but the vehemence of its advocates, who denounced Sir E. Grey as "not well-versed in economics," helped to create an impression in Germany—which Sir E. Grey was unable to dispel—that the Central Powers ran no risk of British interference by invading Belgium. Short-sighted opinion as to British interests seems to have played into the hands of the militants in Germany, and to have helped to bring about the outbreak of war.

There is also some reason for believing that the leading school of economists in England has, by its exaggerations, exerted an influence in preventing the war from being prosecuted effectively. Consumption is an important aspect of economic life ; but it is only one aspect. Cheapness to the consumer is not absolutely essential to national prosperity, though it is one of several factors which must be taken into due account. Exaggerated opinions in regard to the command of commodities have appeared to give a scientific basis to the action of Welsh miners in treating their standard of comfort as of supreme importance, and in regarding the supply of coal to the Navy as a subsidiary matter. It has added economic support to the view of those who thought that, apart from naval and military considerations, it would be a useful political stroke to divert our energies to the Dardanelles, so that a supply of wheat might be secured from the Black Sea. The operations have been long and costly, in lives at all events ; and they have raised the question whether the conditions which make for cheap food may not involve too high a cost, and force us to have recourse to measures which are not the best possible for the welfare of the community. Whatever opinions we may hold on these points, it is surely obvious that study is to be pursued, not only with the object of analysing economic data, but

¹ *Daily Chronicle*, 3rd August, 1914.

² J. M. Keynes in *Economic Journal*, September, 1915 ; p. 452.

with the view of cultivating the power of judging soundly upon these data. The modern school of English Economists, unlike the Economists of Germany, has done little to prepare the minds of the people for being ready to take a part in the struggle in which we are now engaged.

II.—Though¹ the Economists of the modern school have won the approval of Lord Haldane,² it is noticeable that they have entirely deserted the standpoint of Adam Smith.³ The wide views which he entertained, and the complete harmony between the *Wealth of Nations* and the *Theory of Moral Sentiments*, have been recently examined with great acumen by Professor Nicholson;⁴ and it is easy to show that he took account of forces which the modern school is tempted to ignore as not falling within the scope of the science. Adam Smith had no confidence in the “man of system,” who imagines that Society is a mere mechanism, and forgets that on “the great chess board of human society⁵ every single piece has a principle of motion of its own.” So far from regarding the conscious interest and advantage of individuals as the only thing to be considered, he warned us against overestimating “the trinkets of frivolous utility.”⁶ He finds in the conduct of a soldier an illustration of the difference in the light in which an object appears naturally to the man himself, and that in which it appears “to the nation he fights for.”⁷ To the man himself, his life is of infinite importance; but to the nation, “the life of a private person is scarcely of any consequence.” It is by looking at himself from the point of view of the nation, and thus acting, not merely from personal interest, but in a public spirit, that a man shows he is a good citizen.⁸ During the last few months the motive of the love of country has shown itself as a force which has enabled us to stand the enormous strain which the war has put on the resources of the nation. The strength of

¹ This and the following paragraphs were not read at the meeting of the Section.

² *Economic Journal*, XV, p. 501. See also my *Wisdom of the Wise*, pp. 10–20.

³ For a fuller criticism see my *Free Trade Movement*, p. 202.

⁴ *A Project of Empire*.

⁵ *Moral Sentiments*, VI, ii, Vol. II, p. 104.

⁶ *Moral Sentiments*, IV, i, Vol. I, p. 436. See also p. 433.

⁷ *Ib.* IV, ii, Vol. I, p. 462.

⁸ *Moral Sentiments*, VI, ii, Vol. II, p. 98.

the desire to serve the country is shown not only in the number of recruits who have submitted to discipline and proved their readiness to lay down their lives, but in the eagerness of men and women to find out what they can do, and to do it with their might. Patriotism has been a motive to diligence among all classes such as we never knew before; but the modern school cannot attempt to take it into account, because it "evades the economic calculus."¹ Adam Smith was at pains to distinguish qualitatively between different kinds of motive; but he does not appear to have busied himself about the quantitative measurement of the motives which appeal to an individual;² at all events he did not make this the basis of his inquiry into the nature and causes of the wealth of nations.

III.—From the humanitarian point of view, war is a ghastly crime, and it is most important that we should examine the motives—economic or other—which have contributed to induce a highly civilised people to commit this crime. There are economic causes of crime both within a country and in international relations; and war may, besides, be regarded from an economic standpoint as a terrible waste. We may beware of lecturers who prophesy smooth things and assure us that "there ought to be rather a good time after the war."³ The whole world will not come right of itself, out of mere revulsion from the horrors of war, unless we are at pains to do our best to set it right. There are Economists who are anxious that Germany should not be so badly beaten as to be a less valuable market for our exports in the future;⁴ but to continue to give Germany scope to build up her industrial resources, at the expense of other peoples, is to play into the hands of those who cherish an overweening Teutonic ambition. Some Economists believe that the waste caused by war will bring about an enormously increased demand for goods, and thus be a stimulus to industry of every kind, without apparently taking account of the unfavourable conditions which will burden labour and capital in the future. There is also a widely diffused feeling among the general public that war has exorcised the spirit of class jealousy, and that in time

¹ Marshall, *Principles of Economics*, I, p. 81.

² Compare *Ib.*, I, pp. 57, 75.

³ A. Greenwood at Suffrage Summer School. *Cambridge Daily News*, 26th August, 1915.

⁴ Sir Hugh Bell, Section F, Manchester meeting.

to come it will be easy to persuade each individual that his personal interest lies in co-operating with others for the good of the public.

It is a mistake, however, to suppose that a remedy which works well under special conditions is a panacea, or to imagine, because we have got hold of a partial truth, that we have found a complete solution of the problem. Co-operation and co-partnership have been wonderfully successful in doing away with friction, and promoting diligence in many departments of business, such as the South London Gas Company ; and we are apt to suppose that what has been successful occasionally can be introduced generally, so that the labourer and the capitalist shall each see that it is his interest to work with the other to meet the requirements of the public. It seems as if self-interest, fully informed and rightly understood, will solve all difficulties in the industrial world, and serve as a substitute for public spirit and a sense of duty. But the difficulties between labour and capital do not rest on mere misunderstandings, which can be easily cleared up, but on fundamental differences as to the standpoint from which national activity is viewed. In all the material progress of the community, there is loss which falls upon individuals, and which may be irreparable so far as they are concerned. An improvement in machinery is good for the public in the long run—as, for example, the introduction of railways. The public can travel more comfortably and far more cheaply, and the transport of goods of every kind is enormously facilitated, but the stage-coachman, with all his skill and dignity, is gone for ever. In every material improvement it is the same ; there has been a continuous improvement in the agriculture of the country during the last four or five centuries : land yields 30 or 35 bushels an acre, where men were formerly well content if they got 8 or 10 ; but the yeoman farmer has disappeared with the traditional husbandry he practised. In a progressive community we may look at any change, and change is a matter of daily occurrence, from the point of view of its effect upon the public in the future, or we may look upon it from the point of view of the individual workman in the present. Labour looks at the matter from the latter standpoint, and no re-adjustment will bring these two interests into complete harmony. The problem before all classes is a practical one as to the manner in which the interests of the public in the long run can be attained with the least sacrifice

of the individual workman in the present, and that problem cannot be solved in general terms.

Economists have been mistaken in pretending to solve the question generally. They assumed that the aggregate of individuals is identical with the State ; and in an unprogressive community this is approximately true ; but in a progressive community the difference of time must not be ignored. A change which will be beneficial to all the public in the next generation is sure to be injurious to some individuals in the present generation ; though some of them may live to share in the ultimate gain. The classical economists and the *laissez-faire* school concentrated attention on the good of the public in the future ; they believed that the real suffering which they saw around them was merely temporary, and that economic conditions would right themselves if only they were left alone. It is very instructive to read how a benevolent man like Dr. Chalmers¹ viewed the horrors of the Industrial Revolution ; he noted with interest : " How roughly a population can bear to be handled, both by adverse seasons, and by the vicissitudes of trade—and how, after all, there is a stability about a people's means which will keep its ground against many shocks, and amidst many fluctuations. It is a mystery and a marvel to many an observer, how the seemingly frail and precarious interest of the labouring classes should, after all, have the stamina of such endurance, as to weather the most fearful reverses both of commerce and of the seasons ; and that, somehow or other, you find, after an interval of gloomy suffering and still gloomier fears, that the families do emerge again into the same state of sufficiency as before. We know not a fitter study for the philanthropist, than the workings of that mechanism by which a process so gratifying is caused, or in which he will find greater reason to admire the exquisite skill of those various adaptations, that must be referred to the providence of Him who framed society, and suited so wisely to each other the elements whereof it is composed." But we are all agreed now that, in the interests of national life, it is important to take account of the conditions of individual work and the standard of comfort of the labourers, and that cheapness to the public in the long run is not the only thing to be considered.

The modern school of Political Economy has gone to the opposite

¹ *Christian and Civic Economy of Large Towns* III, 36.

extreme, and has seemed to give countenance to the view that whatever promotes the comfort of the individual must be beneficial to the society of which he forms a part. When measured by money standards, and exchange in the markets, it may be so; but, when the element of time is taken into account, the question arises what contribution the individual is making to the welfare of the public in the future. We may at least learn from the war that it is possible for industry to flourish now, at the expense of the future, and for us to live at ease while we throw a heavy burden on posterity. Professor Pigou¹ and the school of Economists, who look primarily at individual comfort in the present, and seem to think the welfare of the public in the long run may be trusted to take care of itself,—are as one-sided and mistaken as the classical economists of a hundred years ago. The principle which both of these schools assume as axiomatic, that the aggregate of individuals may be identified with the community, is, in a progressive society, obviously untrue. The interest of which the aggregate of individuals at the present time is conscious may easily conflict with, or at any rate be inconsistent with, the aggregate interests of the people who will form the community in the future.

If we neither evade the difficulties nor attempt to minimise them, but face them fairly, we need not give way to pessimistic apprehensions about the future of the country. At least we may remember that after the war we shall have one great advantage for dealing with social problems of every kind that has been lacking in the last generation. The war has re-invigorated the national consciousness in the Mother Country, and has thus given us a foundation on which we may hope to rear a national organisation. The attempts at planting small holders on the land, and at dealing with the housing problem, have been sadly futile, because they were isolated and with no foundation; they did not rest on a clear conception of national welfare, and, therefore, they made no appeal to the sense of public duty. But besides this change in the Mother Country there has been also, in consequence of the war, an increased sense of the solidarity of the Empire throughout the Overseas Dominions; people are more ready to welcome

¹ *Wealth and Welfare*, pp. 24, 401; see also my *Christianity and Economic Science*, 91.

Imperialism as the beginning of an international system, when they see that it really points towards internationalism.¹ These new political convictions need not remain in the air, as personal ideals, for they influence the direction of practical efforts of every kind. Economic Science has its limitations, and cannot lay down the course we ought to pursue, but it points out the means by which a national aim may be realised and national duties discharged easily and effectively.

During the past year there has been an immense increase of industrial activity on the part of the State; there has been a nationalisation of some departments of industry, a nationalisation of transport, an increased movement in favour of the nationalisation of mining operations; this change has not been really Socialist, since it has taken place with the consent and assistance of the private capitalist. That it will be maintained to a great extent after the war can scarcely be doubted; and there are other directions in which the activity of the State may be expected. Hitherto agriculture in England has been organised on an individualistic basis; it has depended for progress on the enterprise of individual capitalists, either landlords or farmers, and the diligence of individual small holders or labourers; enormous progress has taken place under this system, in past centuries; but it has recently proved defective under the strain of foreign competition; and land, especially the land in small holdings, is being starved for want of capital. A very great impetus would be given if the State were more ready to lend capital for agricultural purposes; and, as a lender, the State would be able to impose conditions, as to housing and the like, which would render the social improvement of the rural population more possible.

There is much that the State may do for the promotion of the welfare of the public in the long run, but we can see that there is also a great need for cultivating a higher sense of duty in the individual. Economic experts have been ready to assure us that the mere consideration of interests will prove a sufficient substitute for the sense of duty; and that in the new era the work of the world may go on without conscious reference to duty to either God or man. But it is not true: in the march of progress there

¹ E. A. Benians, Suffrage Summer School, *Cambridge Daily News*, 20th August, 1915.

are duties of humanity towards those who are compelled to fall out : we are all bound by human ties to see that the material prosperity of the public shall be so pursued as to involve the minimum of incidental loss to individuals ; and Christians believe that it is by awakening a sense of duty to God that they can best foster a deeper sense of duty to man.

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